HCD-DR4/DR5/DR6/DR440/ W300/W5000/XB500

SERVICE MANUAL

Photo: HCD-DR6

US Model
HCD-W300/W5000
Canadian Model
HCD-W300
AEP Model
UK Model
HCD-XB500
E Model
HCD-DR4/DR5/DR6/DR440
Australian Model
HCD-DR4

HCD-DR4/DR5/DR6/DR440/W300/W5000/ XB500 is the tuner, deck, CD and amplifier section in LBT-DR4/DR5/DR6/DR440/W300/ W5000/XB500.

This stereo system is equipped with the Dolby* B-type noise reduction system.
* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol ⊡ are trademarks of the Dolby Laboratories Licensing Corporation.

CD SECTION	Model Name Using Similar Mechanism	HCD-D290/G3300/XB3
	CD Mechanism Type	CDM37M-5BD32L
	Base Unit Type	BU-5BD32L
	Optical Pick-up Type	KSS-213D/Q-N
TAPE DECK SECTION	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	TCM-230AWR2/230PWR2

SPECIFICATIONS

Amplifier section

(HCD-W5000/W300)
Continuous RMS power output
120 + 120 watts (8 ohms at 1 kHz, 10% THD)
Total harmonics distortion
Less than 0.07% (8 ohms at 1 kHz, 50 W)

(HCD-XB500)
DIN power output (Rated)
90 + 90 watts (8 ohms at 1 kHz, DIN)
Continuous RMS power output (Reference)
120 + 120 watts (8 ohms at 1 kHz, 10% THD)
Music power output (Reference)
200 + 200 watts (8 ohms at 1 kHz, 10% THD)

(HCD-DR440/DR4)
The following measured at AC 120/220/240 V, 50 Hz
DIN power output (Rated)
140 + 140 watts (6 ohms at 1 kHz, DIN)
Continuous RMS power output (Reference)
170 + 170 watts (6 ohms at 1 kHz, 10% THD)

(HCD-DR5)
The following measured at AC 120/220/240 V, 50 Hz
DIN power output (Rated)
160 + 160 watts (6 ohms at 1 kHz, DIN)
Continuous RMS power output (Reference)
200 + 200 watts (6 ohms at 1 kHz, 10% THD)

(HCD-DR6)
The following measured at AC 120/220/240 V, 50 Hz
DIN power output (Rated)
180 + 180 watts (6 ohms at 1 kHz, DIN)
Continuous RMS power output (Reference)
250 + 250 watts (6 ohms at 1 kHz, 10% THD)

Inputs
PHONO IN (phono jacks): sensitivity 3 mV, impedance 47 kilohms
MIX MIC (phone jack): sensitivity 1 mV, impedance 10 kilohms
VIDEO1 IN (phono jacks): sensitivity 250 mV, impedance 47 kilohms
VIDEO2 IN (phono jacks): sensitivity 250 mV, impedance 47 kilohms
MD IN (phono jacks): sensitivity 450 mV, impedance 47 kilohms

Outputs
PHONES (stereo phone jack): accepts headphones of 8 ohms or more
VIDEO OUT (phono jack): voltage 250 mV, impedance 1 kilohm
MD OUT (phono jacks): voltage 250 mV, impedance 1 kilohm
FRONT SPEAKER:
(HCD-W5000/W300/XB500) accepts impedance of 8 to 16 ohms
(HCD-DR6/DR5/DR440/DR4) accepts impedance of 6 to 16 ohms
SURROUND SPEAKER (HCD-W300 only): accepts impedance of 16 ohms

— Continued on next page —

COMPACT DISC DECK RECEIVER

MICROFILM

SONY®

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser (λ = 780 nm) Emission duration: continuous
Laser output	Max. 44.6 μW* * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Wavelength	780 – 790 nm
Frequency response	2 Hz – 20 kHz (±0.5 dB)
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB
CD DIGITAL OUT (square optical connector jack, rear panel)	
Wave length:	660 nm
Output level:	–18 dBm

Tape player section

Recording system	4-track 2-channel stereo
Frequency response (DOLBY NR OFF)	
	40 – 13,000 Hz (±3 dB), using a Sony TYPE I cassette
	40 – 14,000 Hz (±3 dB), using a Sony TYPE II cassette
Wow and flutter	±0.15% W. Peak (IEC) 0.1% W. RMS (NAB) ±0.2% W. Peak (DIN)

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	
(2 band model)	
North American model:	87.5 – 108.0 MHz (100 kHz step)
Other models:	87.5 – 108.0 MHz (50 kHz step)
(3 band model)	
FM:	87.5 – 108.0 MHz (50 kHz step)
UKV:	65.0 – 74.0 MHz (10 kHz step) STEREO PLUS
Antenna	FM wire antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
North American model:	530 – 1,710 kHz (with the tuning interval set at 10 kHz) 531 – 1,602 kHz (with the tuning interval set at 9 kHz)
Middle Eastern models:	531 – 1,602 kHz (with the tuning interval set at 9 kHz)
Other models:	531 – 1,602 kHz (with the tuning interval set at 9 kHz) 530 – 1,710 kHz (with the tuning interval set at 10 kHz)
Antenna	AM loop antenna, External antenna terminals
Intermediate frequency	450 kHz

General

Power requirements	
North American model:	120 V AC , 60 Hz
European model:	230 V AC, 50/60 Hz
Mexican model:	120 V AC , 50/60 Hz
Australian model:	230 – 240 V AC, 50/60 Hz
Other models:	120 V, 220 V, or 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption	
(HCD-DR6)	220 watts
(HCD-DR5)	200 watts
(HCD-DR440/DR4)	170 watts
(HCD-W5000/W300)	
U.S.A. model:	200 watts
Canadian model :	200 VA
(HCD-XB500)	180 watts
Dimensions (w/h/d)	Approx. 356 × 423 × 446 mm ($14^{1}/_{8} \times 16^{3}/_{4} \times 17^{5}/_{8}$ in) incl. projecting parts and controls
Mass	
(HCD-DR6)	Approx. 15.0 kg (33 lb 2 oz.)
(HCD-DR5)	Approx. 14.0 kg (30 lb 14 oz.)
(HCD-DR440/DR4/ W5000/W300/XB500)	Approx. 13.5 kg (29 lb 13 oz.)

Design and specifications are subject to change without notice.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL : USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLING.
VORSICHT : UNSICHTBARE LASERSTRAHLUNG. WENN ABDECKUNG GEÖFFNET UND SICHEREITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.
VARO! : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING : OSYNLING LASERSTRÅLING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.
ADVERSEL : USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VIGYAZAT! : A BURKOLAT NYITÁSAKOR LÁTHATATLAN LÉZERSUGÁRVESZÉLY! KERÜLJE A BESUGÁRZÁST!

This caution label is located inside the unit.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:
Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth Ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

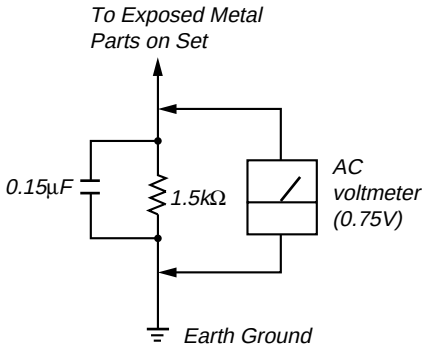


Fig. A. Using an AC voltmeter to check AC leakage.

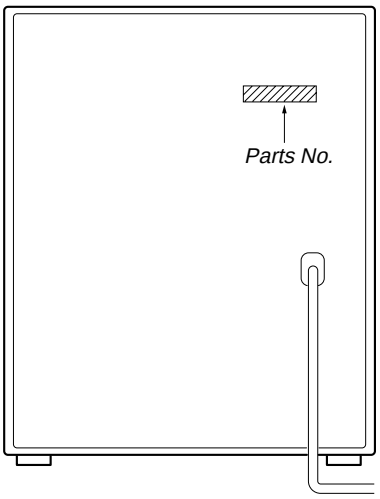
SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

MODEL IDENTIFICATION
— BACK PANEL —



MODEL	PRODUCT COUNTRY	PARTS No.
DR4: E, AR model	INDONESIA PRODUCT	4-214-786-0☐
DR4: TH model	THAI PRODUCT	4-214-786-9☐
DR4: SP model	INDONESIA PRODUCT	4-214-786-1☐
DR4: MX model	INDONESIA PRODUCT	4-214-786-2☐
DR4: AUS model	INDONESIA PRODUCT	4-214-786-3☐
DR4: EA model	INDONESIA PRODUCT	4-214-786-4☐
DR5: E, AR model	INDONESIA PRODUCT	4-214-786-5☐
DR5: SP model	INDONESIA PRODUCT	4-214-786-6☐
DR5: MX model	INDONESIA PRODUCT	4-214-786-7☐
DR440: MX model	INDONESIA PRODUCT	4-214-786-8☐
W300: US model	INDONESIA PRODUCT	4-214-787-4☐
W300: CND model	INDONESIA PRODUCT	4-214-787-5☐
W5000: US model	INDONESIA PRODUCT	4-214-787-6☐
DR6: E, AR model	INDONESIA PRODUCT	4-214-788-3☐
DR6: MX model	INDONESIA PRODUCT	4-214-788-5☐
XB500: AEP, UK model	INDONESIA PRODUCT	4-214-785-0☐
XB500: AEP model	THAI PRODUCT	4-214-785-2☐

- Abbreviation
  CND : Canadian model
  TH : Thailand model
  SP : Singapore model
  MX : Mexican model
  AUS : Australian model
  EA : Saudi Arabia model
  AR : Argentine model

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveform is output four times.

SECTION 1
SERVICING NOTE

About CD-TEXT display

This unit is provided with a simple CD-TEXT display function.
The CD-TEXT contents of 20 tracks are displayed on the fluorescent display tube.
Since the function is simple, some special characters may not be displayed, or may be displayed as other characters.

TABLE OF CONTENTS

1. SERVICING NOTE 4

2. GENERAL 6

2. DISASSEMBLY

3-1. Front Panel 8
3-2. Main Board 8
3-3. Sub Panel 9
3-4. CD-L/CD-R Board and CD LID Assembly 9
3-5. Tape Mechanism Deck and Cassette LID 10
3-6. CD Mechanism Deck 10
3-7. Base Unit 10
3-8. Disc Table 11

4. SERVICE MODE 12

5. MECHANICAL ADJUSTMENTS 16

6. ELECTRICAL ADJUSTMENTS 16

7. DIAGRAMS

7-1. Circuit Boards Location 20
7-2. Block Diagrams
- BD (CD) Section 21
- Deck Section 23
- Main (1/2) Section 25
- Main (2/2) Section 27
- Power Section (DR4, DR5, DR6, DR440 model) 29
- Power Section (W300, W5000, XB500 model) 31
- Display Section 33

7-3. Printed Wiring Board – BD (CD) Section – 37
7-4. Schematic Diagram – BD (CD) Section – 39
7-5. Printed Wiring Board – Main Section – 41
7-6. Schematic Diagram – Main (1/5) Section – 43
7-7. Schematic Diagram – Main (2/5) Section – 45
7-8. Schematic Diagram – Main (3/5) Section – 47
7-9. Schematic Diagram – Main (4/5) Section – 49
7-10. Schematic Diagram – Main (5/5) Section – 51
7-11. Schematic Diagram – Deck Section – 53
7-12. Printed Wiring Board – Deck Section – 55
7-13. Schematic Diagram – Power (1/2) Section – (DR4, DR5, DR6, DR440 model) 57
7-14. Schematic Diagram – Power (2/2) Section – (DR4, DR5, DR6, DR440 model) 59
7-15. Printed Wiring Board – Power Section – (DR4, DR5, DR6, DR440 model) 61
7-16. Schematic Diagram – Power (1/2) Section – (W300, W5000, XB500 model) 63
7-17. Schematic Diagram – Power (2/2) Section – (W300, W5000, XB500 model) 65
7-18. Printed Wiring Board – Power Section – (W300, W5000, XB500 model) 67
7-19. Schematic Diagram – Panel FL Section – 69
7-20. Printed Wiring Board – Panel FL Section – 71
7-21. Schematic Diagram – Panel VR Section – 73
7-22. Printed Wiring Board – Panel VR Section – 75
7-23. Schematic Diagram – TC Panel Section – 77
7-24. Printed Wiring Board – TC Panel Section – 79
7-25. Schematic Diagram – CD Panel Section – 81
7-26. Printed Wiring Board – CD Panel Section – 83
7-27. Schematic Diagram – CD Motor Section – 85
7-28. Printed Wiring Board – CD Motor Section – 87
7-29. Schematic Diagram – Jack Section – 89
7-30. Printed Wiring Board – Jack Section – 91
7-31. Schematic Diagram – Trans Section – (W300, W5000, XB500 model) 93
7-32. Printed Wiring Board – Trans Section – (W300, W5000, XB500 model) 95
7-33. Schematic Diagram – Trans Section – (DR4, DR5, DR6, DR440 model) 97
7-34. Printed Wiring Board – Trans Section – (DR4, DR5, DR6, DR440 model) 99
7-35. Schematic Diagram – Leaf SW Section – 100
7-36. Printed Wiring Board – Leaf SW Section – 100
7-37. IC Block Diagrams 101
7-38. IC Pin Functions 102

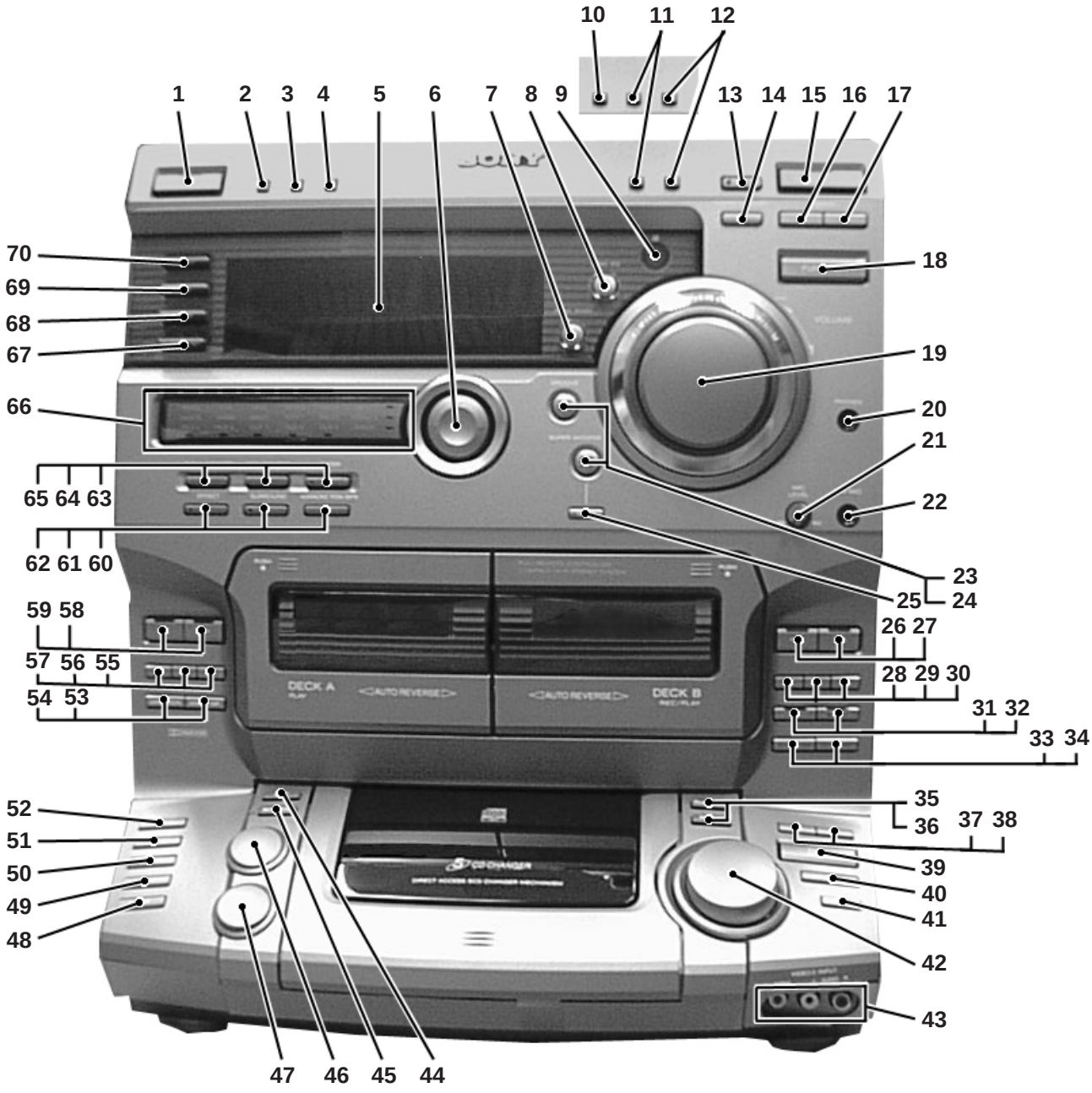
8. EXPLODED VIEWS

8-1. Case and Back Panel Section 105
8-2. Front Panel Section 1 106
8-3. Front Panel Section 2 107
8-4. Chassis Section 108
8-5. TC Mechanism Section 1 (TCM230AWR2/230PWR2) ... 109
8-6. TC Mechanism Section 2 (TCM230AWR2/230PWR2) ... 110
8-7. CD Mechanism Section (CDM37M-5BD32L) 111
8-8. Base Unit Section (BU-5BD32L) 112

9. ELECTRICAL PARTS LIST 113

SECTION 2
GENERAL

Front Panel



LOCATION OF PARTS AND CONTROLS

1 I/⏻ (Power) button and indicator
2 DEMO (STANDBY) button (DR4/DR5/DR6/DR440) POWER SAVE/DEMO (STANDBY) button (W300/W5000/XB500)
3 DISPLAY button
4 SPECTRUM ANALYZER button
5 Display window
6 GEQ control button
7 SYNC BASS button
8 SYNC EQ button
9 Remote sensor
10 PTY button (XB500)
11 TUNING MODE button
12 STEREO/MONO button
13 ENTER/NEXT button and indicator
14 TUNER MEMORY button
15 TUNER/BAND button
16 TUNING - button
17 TUNING + button
18 FUNCTION button
19 VOLUME knob
20 PHONES jack
21 MIC LEVEL knob
22 MIX MIC jack
23 GROOVE button and indicator
24 SUPER WOOFER button and indicator
25 MODE button
26 ◁ (B Deck) button and indicator
27 ▷ (B Deck) button and indicator
28 ■ (B Deck) button
29 ◀◀ (B Deck) button
30 ▶▶ (B Deck) button
31 ❚❚ (B Deck) button
32 ● REC (B Deck) button
33 HI-SPEED DUB button
34 CD SYNCHRO button
35 PLAY MODE button
36 REPEAT button
37 ◀◀ (CD) button
38 ▶▶ (CD) button
39 ▷❚❚ (CD) button and indicator
40 ■ (CD) button
41 DISK SKIP button
42 I◀◀ AMS ▶▶I knob
43 VIDEO2 INPUT jacks
44 EDIT button
45 NON-STOP button and indicator
46 LOOP button
47 FLASH button
48 DISC 5 button
49 DISC 4 button
50 DISC 3 button
51 DISC 2 button
52 DISC 1 button
53 DOLBY NR button
54 DIRECTION button
55 ▶▶ (A Deck) button
56 ◀◀ (A Deck) button
57 ■ (A Deck) button
58 ▷ (A Deck) button
59 ◁ (A Deck) button
60 KARAOKE PON/MPX button
61 SURROUND button and indicator
62 EFFECT button and indicator
63 ENTER button and indicator
64 GEQ CONTROL button
65 P. FILE MEMORY
66 Equalizer indicators
67 ◴/CLOCK SET button
68 SLEEP button
69 REC button and indicator
70 DAILY button and indicator

• AMS is the abbreviation for Automatic Music Sensor.

This section is extracted from instruction manual.

Step 3: Setting the time (continued)

Tip

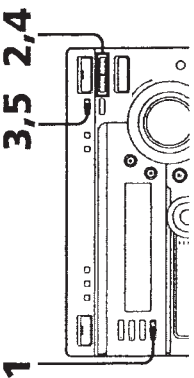
If you make a mistake, start over from step 1.

Notes

• You cannot set the time in Power Saving mode (see page 10).
• The clock setting is canceled when you disconnect the power cord or if a power failure occurs.

Step 3: Setting the time

You must set the time before using the timer functions. The clock is on a 24-hour system for the European and Brazilian models, and a 12-hour system for other models.
The 24-hour system model is used for illustration purposes.



1 Press ◴/CLOCK SET.
The hour indication flashes.

2 Press TUNING +/– to set the hour.

3 Press ENTER/NEXT.
The minutes indication flashes.

4 Press TUNING +/– to set the minutes.

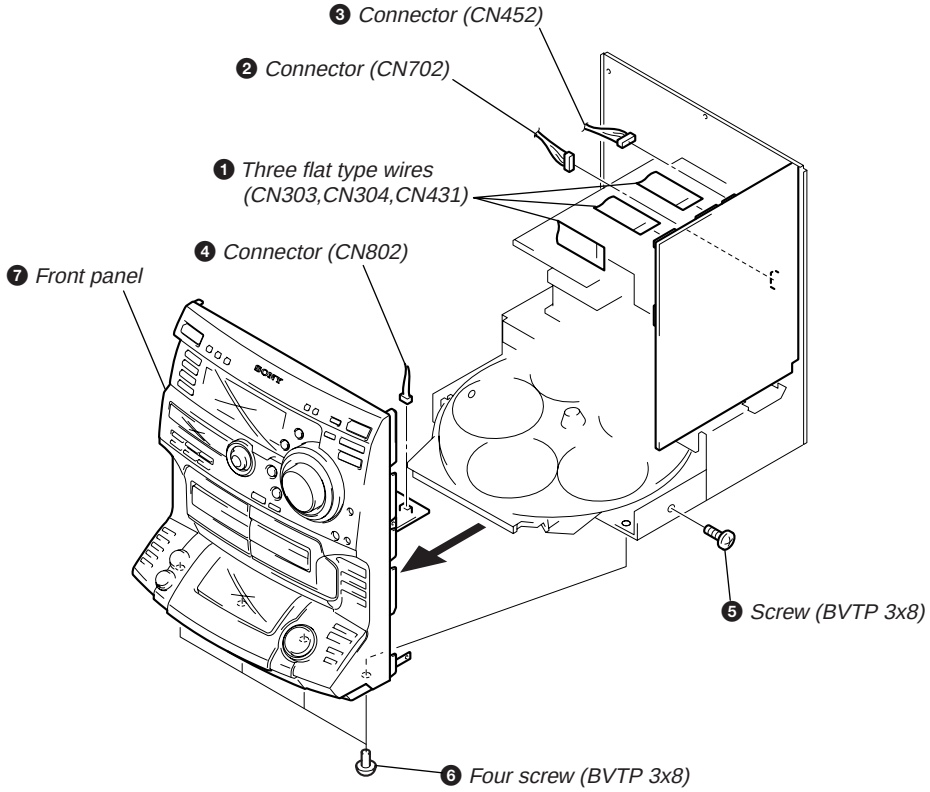
5 Press ENTER/NEXT.
The clock starts.

7 8

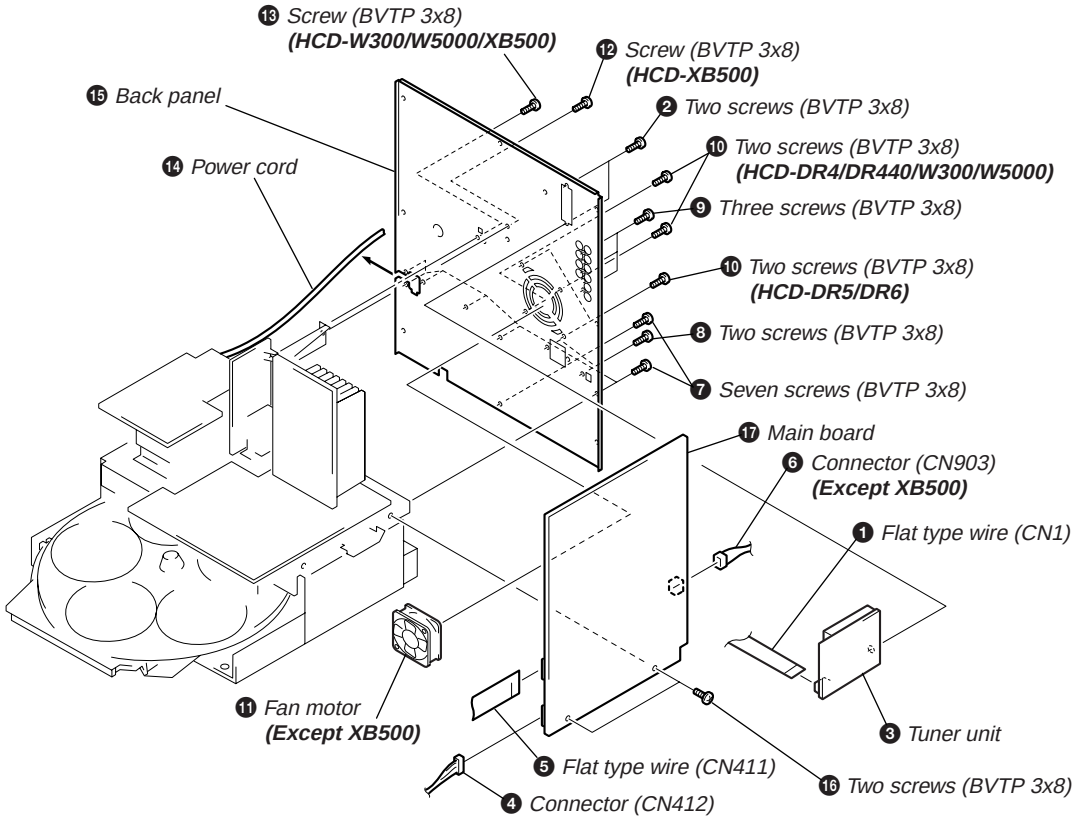
SECTION 3
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

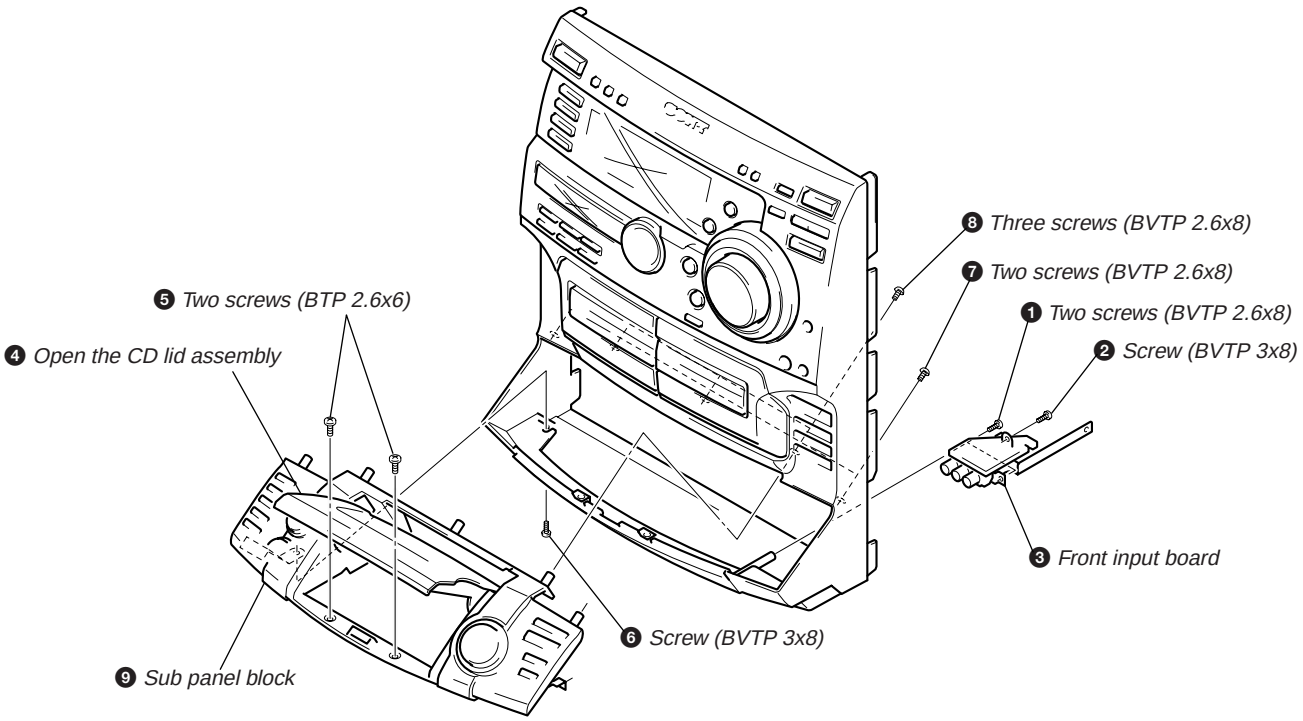
3-1. FRONT PANEL



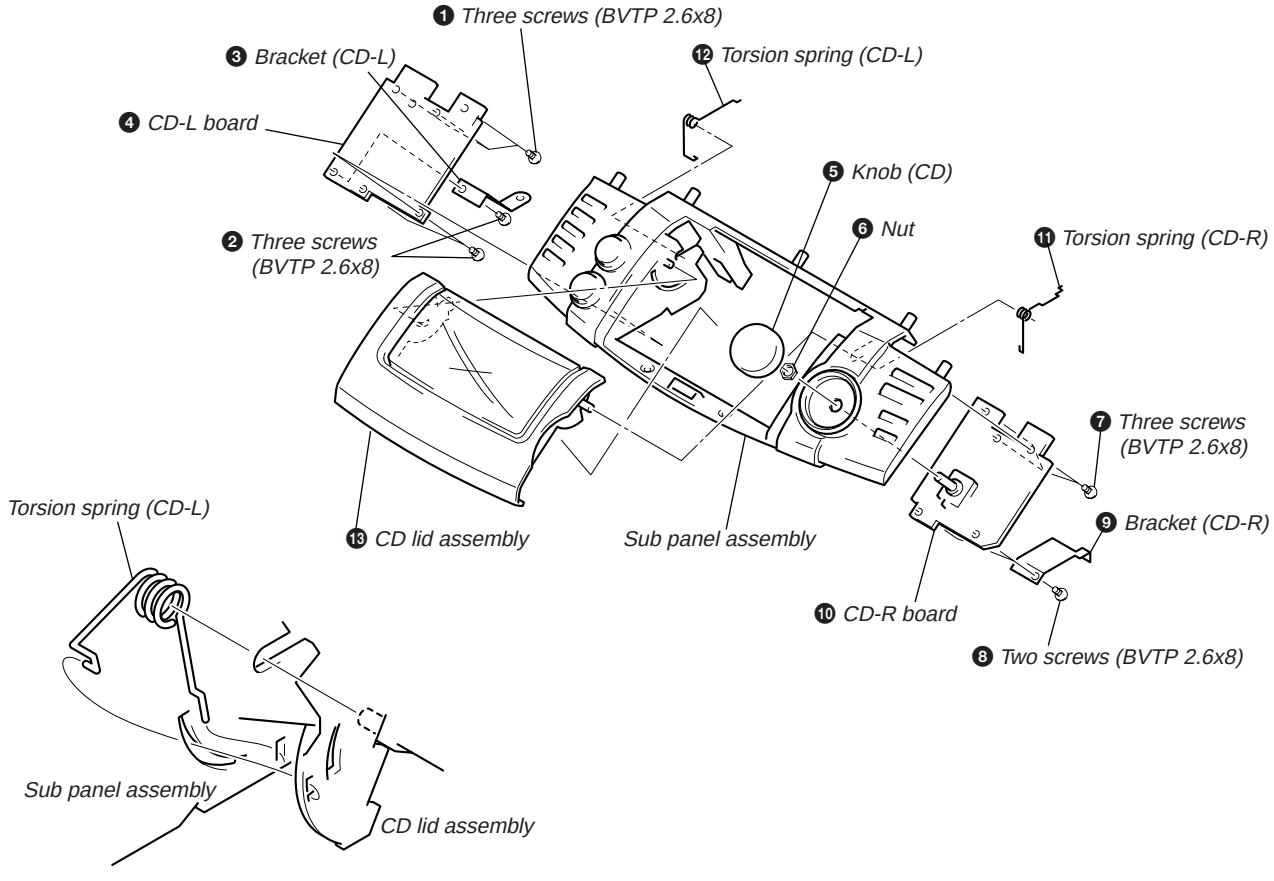
3-2. MAIN BOARD


⓭ Screw (BVTP 3x8) (HCD-W300/W5000/XB500)
⓬ Screw (BVTP 3x8) (HCD-XB500)
⓯ Back panel
❷ Two screws (BVTP 3x8)
⓮ Power cord
❿ Two screws (BVTP 3x8) (HCD-DR4/DR440/W300/W5000)
❾ Three screws (BVTP 3x8)
❿ Two screws (BVTP 3x8) (HCD-DR5/DR6)
❽ Two screws (BVTP 3x8)
❼ Seven screws (BVTP 3x8)
⓱ Main board
❻ Connector (CN903) (Except XB500)
❶ Flat type wire (CN1)
⓫ Fan motor (Except XB500)
❸ Tuner unit
❺ Flat type wire (CN411)
⓰ Two screws (BVTP 3x8)
❹ Connector (CN412)

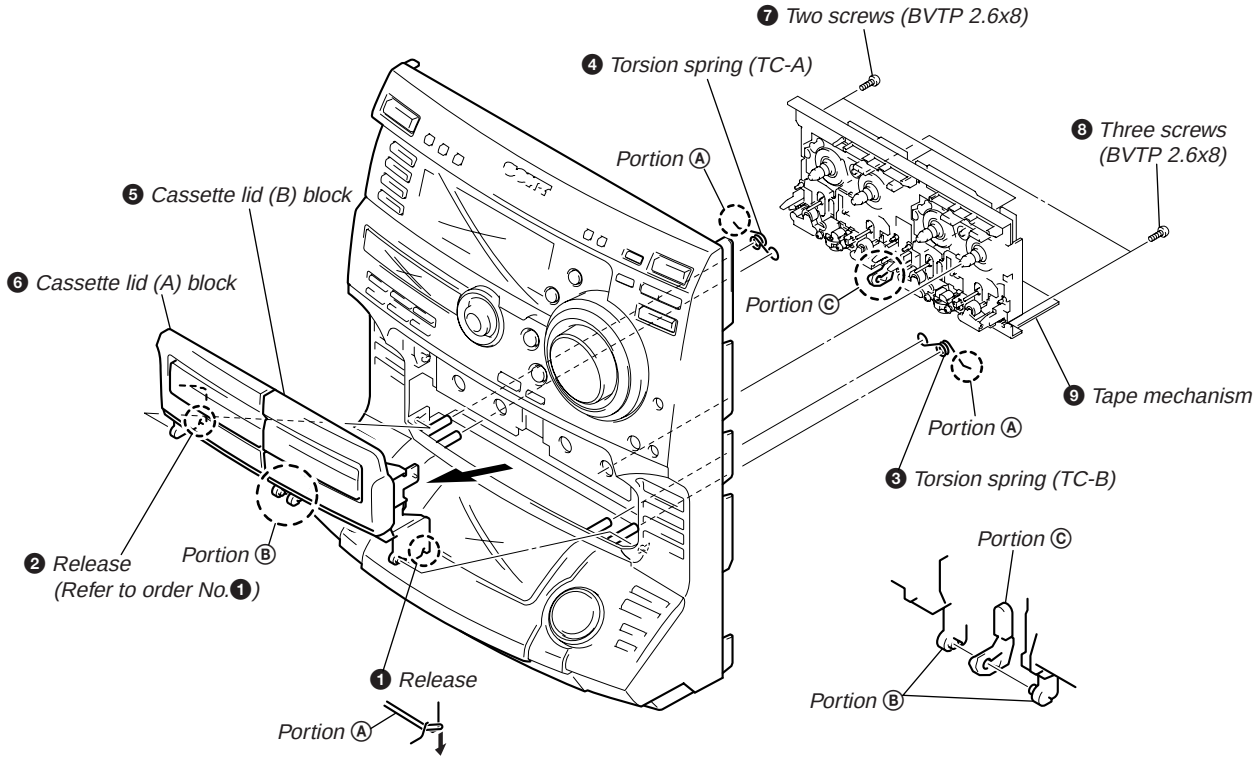
3-3. SUB PANEL


❽ Three screws (BVTP 2.6x8)
❼ Two screws (BVTP 2.6x8)
❶ Two screws (BVTP 2.6x8)
❷ Screw (BVTP 3x8)
❺ Two screws (BTP 2.6x6)
❹ Open the CD lid assembly
❸ Front input board
❻ Screw (BVTP 3x8)
❾ Sub panel block

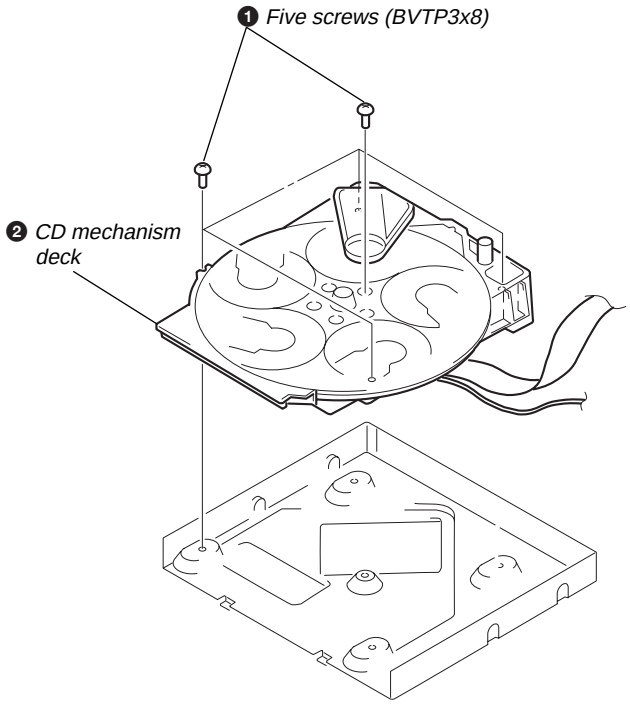
3-4. CD-L/CD-R BOARD AND CD LID ASSEMBLY



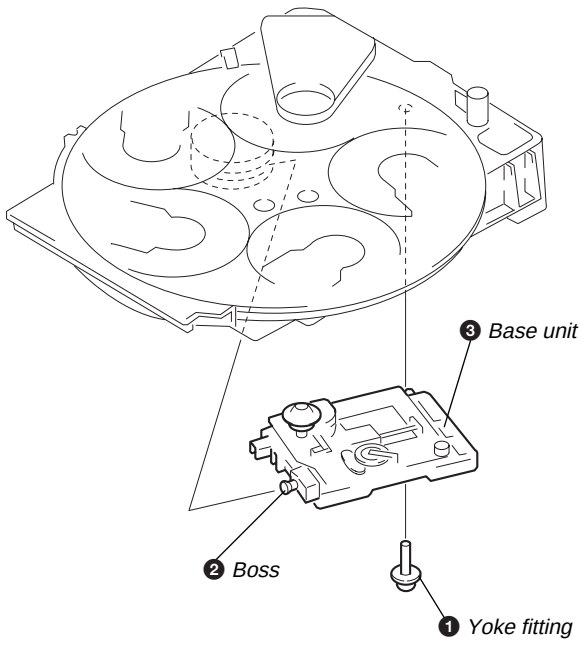
3-5. TAPE MECHANISM DECK AND CASSETTE LID



3-6. CD MECHANISM DECK

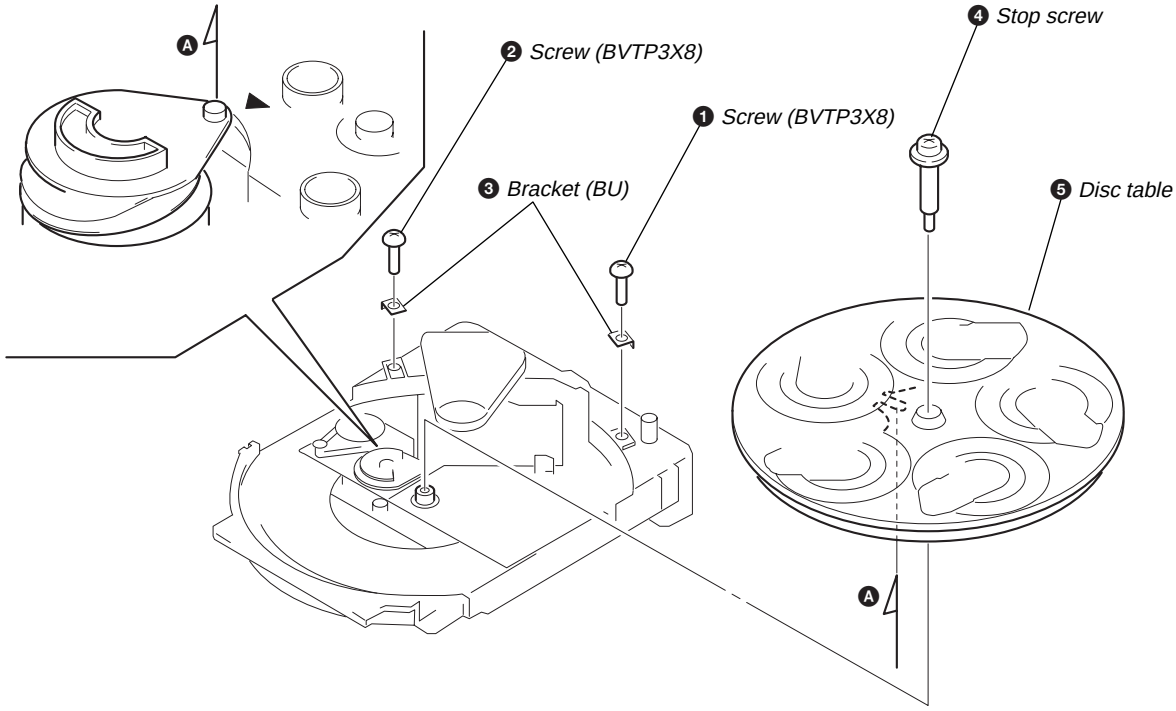


3-7. BASE UNIT



3-8. DISC TABLE

Note:
When the disc table is installed, adjust the positions of roller cam and mark ▶ as shown in the figure, then set to the groove of disc table.



SECTION 4
SERVICE MODE

MC Cold Reset

• The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press three buttons [⏲/CLOCK SET], [ENTER], and [I/⏻] simultaneously.
2. "COLD RESET" is displayed on the fluorescent display tube and reset is executed.

CD Delivery Mode

• This mode moves the pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Press [LOOP] button and [I/⏻] button simultaneously.
3. A message "LOCK" is displayed on the fluorescent indicator tube, and the CD delivery mode is set.

MC Hot Reset

• This mode resets the set with the preset data kept stored in the memory. The hot reset mode functions same as if the power cord is plugged in and out.

Procedure:

1. Press three buttons [⏲/CLOCK SET], [ENTER], and [DISC 1] simultaneously.
2. The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

Sled Servo Mode

• This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the pick-up.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Press three buttons [⏲/CLOCK SET], [ENTER], and [DISC 5] simultaneously.
3. The Sled Servo mode is selected, if "CD" is blanking on the fluorescent indicator tube.
4. With the CD in stop status, When the [I◀◀ AMS ▶▶I] knob is rotated in the clockwise direction, the pick-up moves outside. When rotated counterclockwise, it moves inside.
5. To exit from this mode, perform as follows:
   1) Move the pick-up to the most inside track.
   2) Execute MC cold reset. (Press the three buttons [⏲/CLOCK SET], [ENTER], and [I/⏻] button simultaneously.)

Note:

• Always move the pick-up to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
• Do not run the sled motor excessively, otherwise the gear can be chipped.

Change-over of AM Tuner Step between 9kHz and 10kHz

• A step of AM channels can be changed over between 9kHz and 10kHz.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Select the function "TUNER", and press [TUNER/BAND] button to select the BAND "AM".
3. Press [I/⏻] button to turn the set OFF.
4. Press [ENTER] and [I/⏻] buttons simultaneously, and the display of fluorescent indicator tube changes to "AM 9k STEP" or "AM 10k STEP", and thus the channel step is changed over.

LED and Fluorescent Indicator Tube All Lit, Key Check Mode

Procedure:

1. Press three buttons [⏲/CLOCK SET], [ENTER], and [DISC 2] simultaneously.
2. LEDs and fluorescent indicator tube are all turned on.
   Press [DISC 2] button, and the key check mode is activated.
3. In the key check mode, the fluorescent indicator tube displays "K @V0 J0". Each time a button is pressed, "K"value increases. However, once a button is pressed, it is no longer taken into account.
   "J" Value increases like 1, 2, 3 ... if rotating [I◀◀ AMS ▶▶I] knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "-" direction.
   "V" Value increases like 1, 2, 3 ... if rotating [VOLUME] knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "-" direction.
4. To exit from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

AMS Test Mode

• This mode is used for checking the AMS operations of the tape deck.

JIG
7-819-039-12 Alignment tape, AMS-110A

Procedure:

1. Press the I/⏻ button to turn the set ON.
2. Set the tape (AMS-110A).
3. Press the three buttons ⏲/CLOCK SET , ENTER , and DISC 3 button simultaneously.
4. "TEST MODE" is displayed on the fluorescent display tube.
5. Press the FUNCTION button and switch the function to the deck with the tape (AMS-110A).
6. Press the CD SYNCHRO button. "AMS CHECK" is displayed on the fluorescent display tube and the tape is rewound.
7. AMS starts in the normal direction. If the AMS count is 2 at shut down, proceed to step 8.
   "NG" is displayed at other times, and the deck stops.
8. AMS starts in the opposite direction. If the AMS count is 2 at shut down again, "OK" is displayed.
   "NG" is displayed at other times.

Aging Mode

During the aging mode, both the CD player and tape deck are executed together.

• If an error occurs:

Aging stops, and the error state is displayed on the fluorescent display tube.

• If no error occurs:

Aging is repeated.

Procedure:

1. Press the I/⏻ button to turn the set ON.
2. Load 10 minute tapes with unbent rec-proof tabs in decks A and B.
3. Set CDs on the DISC 1 and DISC 4 tables.
4. Set the CD mode REPEAT to OFF and PLAY MODE to ALL DISCS.
   (Press the PLAY MODE and REPEAT buttons to set these modes.)
5. Press the FUNCTION button to switch the function to "CD".
6. Press the three buttons ⏲/CLOCK SET , ENTER , and DISC 4 button simultaneously.
7. Aging starts.
8. To end aging, press the I/⏻ button to turn the set OFF.

Aging Sequence:

Aging is performed in the following sequence.

• Tape Deck

1. The tape in deck A is rewound. "TAPE A AG-1" is displayed.
2. The FWD side of deck A is played for two minutes.
   "TAPE A AG-2" is displayed.
3. The tape in deck A is fast forwarded. "TAPE A AG-3" is displayed. Fast forward is carried out for 20 seconds or to the tape end.
4. The RVS side of deck A is played for two minutes.
   "TAPE A AG-4" is displayed.
5. The tape in deck A is rewound. "TAPE A AG-5" is displayed.
6. The FWD side of deck B is played for two minutes.
   "TAPE B AG-2" is displayed.
7. The tape in deck B is fast forwarded. "TAPE B AG-3" is displayed. Fast forward is carried out for 20 seconds or to the tape end.
8. The RVS side of deck B is played for two minutes.
   "TAPE B AG-4" is displayed.
9. The tape in deck A is rewound. "TAPE A AG-5" is displayed.
10. Repeated from step 2.

• CD

1. The tray rotates.
2. DISC 1 is chucked.
3. The TOC is read.
4. The first track is played for 2 seconds.
5. The last track is played for 2 seconds.
6. The tray rotates.
7. DISC 4 is chucked.
8. The TOC is read.
9. The first track is played for 2 seconds.
10. The last track is played for 2 seconds.
11. Repeated from step 1.

• Display when ended abnormally
When the tape deck is abnormal:

The state when ended abnormally is displayed.
The contents of display are the same as that during aging.

When the CD player is abnormal:

A message indicating that errors such as “CD MEC ERR” have occurred.
Check the error contents in the following error history display mode.

Error History Display Mode

Mode which enables the history of error occurring in the CD player to be checked.
Execute this mode after ending the aging mode.

Procedure:
1. Press the I/⏻ button to turn the set ON.
2. Press the three buttons ⏲/CLOCK SET , ENTER , and CD SYNCHRO simultaneously.
3. A message such as “EMC@@EDC**” is displayed.
   @@ : Number of mechanical errors (Up to three past errors)
   ** : Number of errors (NO DISC ERROR) which occurs after chucking (Up to three past errors)
4. When checking the history of mechanical errors, press the PLAY MODE button. When checking errors after chucking, press the REPEAT button to switch the display.
5. Press the I/⏻ button to end and turn the set OFF.
6. To erase the error history, perform COLD reset.
   (Press the three buttons ⏲/CLOCK SET , ENTER , and DISC 1 simultaneously.

• Viewing the mechanical error history display
(Switch the history by pressing the PLAY MODE button.)

Display
E@@M#*****

@@ : Error number. 00 is the newest.

: Operating state of table

0 : Currently in the INITIAL mode
7 : Currently rotating to the right
8 : Currently rotating to the left
A : Currently chucking down
B : Currently chucking up

* : Invalid

• Viewing the NO DISC ERROR history display
(Switch the history by pressing the REPEAT button.)

Display

E@@D##$$%*

@@ : Error number. 00 is the newest

: Error contents
01: Focus error
02: GFS error
03: Setup error

$$: Retries
00: NO DISC is determined without attempting chucking retry
02: NO DISC is determined after chucking retry.

% : State when determined as NO DISC
1 : When stopped
2 : At setup
3 : At TOC READ
4 : When accessing
5 : When playing
6 : When pausing
7 : When manual searching (during play)
8 : When manual searching (during pausing)
* : Invalid

SECTION 5
MECHANICAL ADJUSTMENTS

Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:
   - record/playback heads
   - erase head
   - capstan
   - pinch rollers
   - rubber belts
   - idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	31 to 71 g • cm (0.43 – 0.98 oz • inch)
FWD back tension	CQ-102C	2 to 6 g • cm (0.02 – 0.08 oz • inch)
REV	CQ-102RC	31 to 71 g • cm (0.43 – 0.98 oz • inch)
REV back tension	CQ-102RC	2 to 6 g • cm (0.02 – 0.08 oz • inch)
FF/REW	CQ-201B	71 to 143 g • cm (0.98 – 1.99 oz • inch)
FWD tension	CQ-403A	100 g or more (3.53 oz or more)
REV tension	CQ-403R	100 g or more (3.53 oz or more)

SECTION 6
ELECTRICAL ADJUSTMENTS

DECK SECTION **0 dB=0.775V**

1. Demagnetize the record/playback head with a head damagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

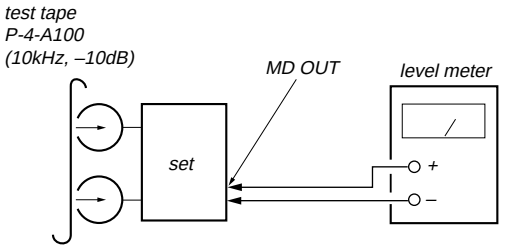
Tape	Signal	Used for
P-4-A100	10 kHz, –10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Level Adjustment

Record/Playback Head Azimuth Adjustment (Deck A, Deck B)

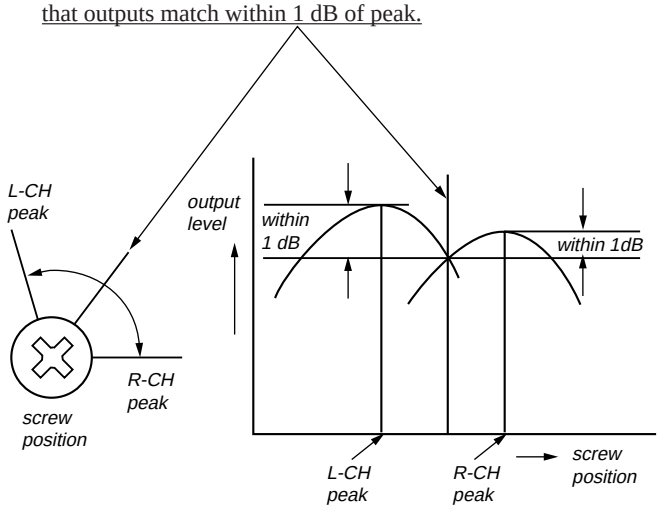
Note: Perform this adjustments for both decks.

Procedure:

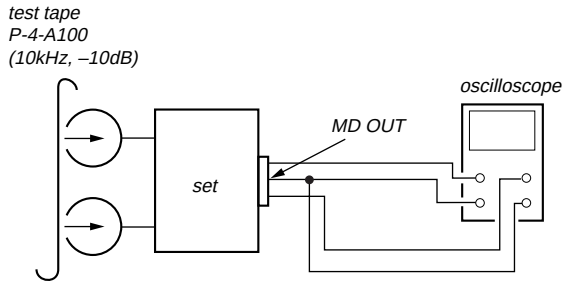
1. Mode : Playback

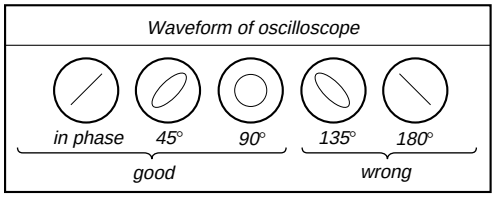


2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of peak.



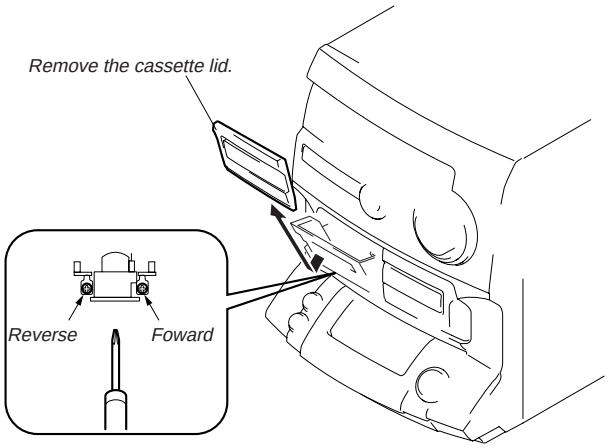
3. Mode: Playback





4. After the adjustments, apply suitable locking compound to the parts adjusted.

Adjustment Location: Playback Head (Deck A)
Record/Playback/Erase Head (Deck B)



Tape Speed Adjustment (Deck A)

Note: Set the test mode using the following method and begin tape speed adjustment.
In the test mode, the speed will switch to double speed or normal speed each time the HI-SPEED DUB button is pressed.

Procedure:
With the power turned ON, press the ⏲/CLOCK SET button, ENTER button, and DISC 3 button simultaneously.
(The "VOLUME" on the fluorescent display tube will blink while in the test mode.)
To exit the test mode, press the I/⏻ button.

1. Insert the WS-48B into deck B.
2. Press the ▷ button of deck B.
3. Press the HI-SPEED DUB button and play the tape at double speed.
4. Adjust RV1001 of the LEAF SW board so that the reading of the frequency counter becomes 6000 ± 180 Hz.
5. Press the HI-SPEED DUB button and play the tape at normal speed.
6. Adjust RV1002 of the LEAF SW board so that the reading of the frequency counter becomes 3000 ± 90 Hz.

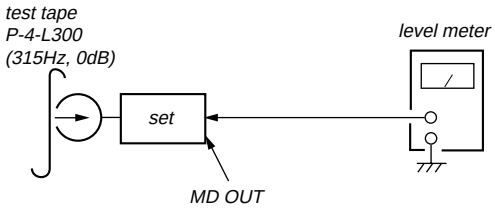
Adjustment Location: LEAF SW board

Sample Value of Wow and flutter

W.RMS (JIS) less than 0.3%
(test tape: WS-48B)

Playback Level Adjustment (Deck A, Deck B)

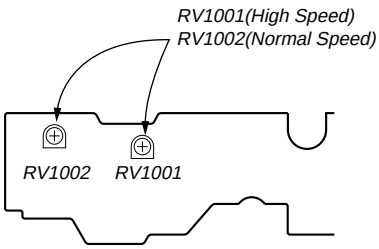
Procedure:
Mode: Playback



Deck A is RV311 (L-CH) and RV411 (R-CH), deck B is RV301 (L-CH) and RV401 (R-CH)
so that adjustment within the following adjustment level.

Adjustment level:
CN301 playback level: 301.5 to 338.3 mV (–8.2 to –7.2 dB)
level difference between the channels: within ± 0.5 dB
Adjustment Location: AUDIO board

Adjustment Location [LEAF SW BOARD]

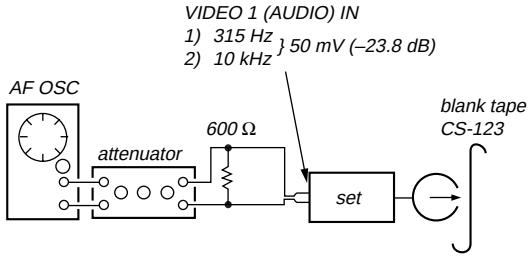


Record Bias Adjustment (Deck B)

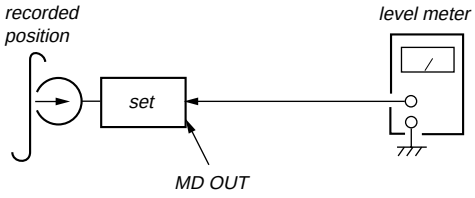
Procedure:

INTRODUCTION
When set to the test mode performed in **Tape Speed Adjustment**, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO 1.
(After recording, press the ◀◀ button without stopping will return to the position where recording was started.)

1. Press FUNCTION button to select VIDEO 1. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B, press the ● REC button, and then press the ▷ button to start recording.
3. Mode: Record



4. Mode: Playback



5. Confirm playback the signal recorded in step 2 become adjustment level as follows.
   If these levels do not adjustment level, adjust the RV341 (L-CH) and RV441 (R-CH) on the AUDIO board to repeat steps 3 and 4.

Adjustment level: The playback output of 10 kHz level difference against 315 Hz reference should be ± 1.0 dB.

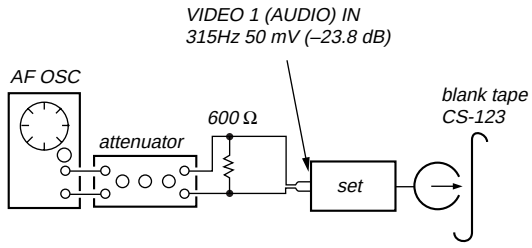
Adjustment Location: AUDIO board

Record Level Adjustment (Deck B)

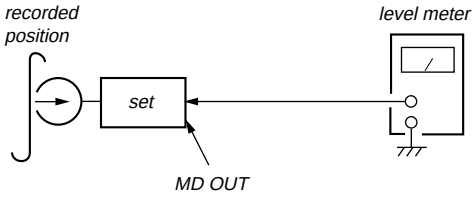
Procedure:

INTRODUCTION
When set to the test mode performed in **Tape Speed Adjustment**, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO 1.
(After recording, press the ◀◀ button without stopping will return to the position where recording was started.)

1. Press FUNCTION button to select VIDEO 1. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B, press the ● REC button, and then press the ▷ button to start recording.
3. Mode: Record



4. Mode: Playback

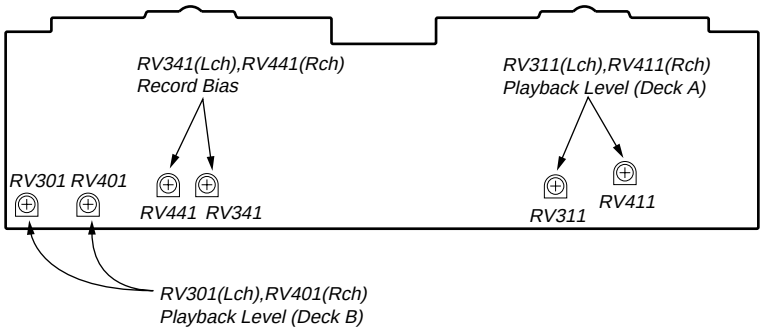


5. Confirm playback the signal recorded in step 2 become adjustment level as follows.
   If these levels do not adjustment level, adjust the RV301 (L-CH) and RV351 (R-CH) on the MAIN board to repeat steps 3 and 4.

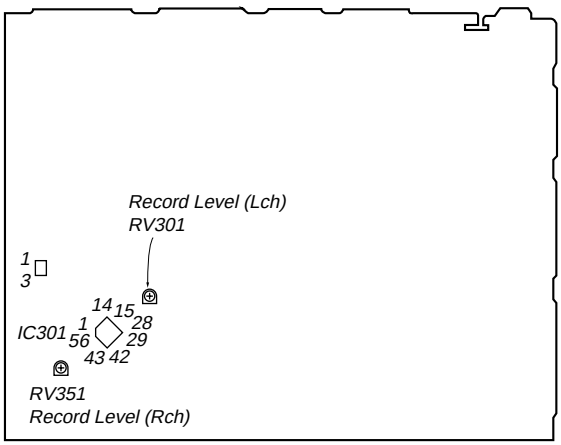
Adjustment level:
CN403 playback level: 47.2 to 53.0 mV (–24.3 to –23.3 dB)

Adjustment Location: MAIN board

Adjustment Location:
[AUDIO BOARD] (Conductor Side)



[MAIN BOARD] (Conductor Side)

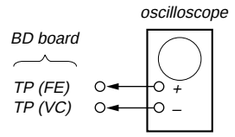


CD SECTION

Note:

1. CD Block is basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

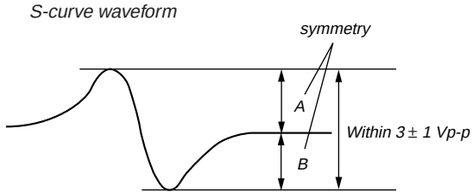
S Curve Check



Procedure :

1. Connect the oscilloscope to test points TP (FE) and TP (VC).
2. Connect TP (FEI) and GND, and TP (AGCCON) and GND of the BD board with lead wires.
3. Press the I/⏻ button to turn the set ON.
4. With the disc (YEDS-18) loaded, press the ▷II button and perform focus search. (Focus search will be performed in the same way even while the disc table is pushed in and out.)
5. Check the symmetry and peak to peak level of the oscilloscope waveform (S curve) at this time.

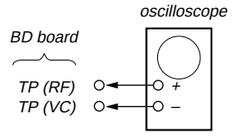
S-curve waveform



6. After check, remove the lead wire connected in step 2.

Note: • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

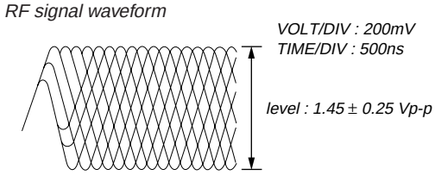


Procedure :

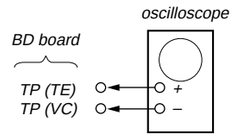
1. Connect oscilloscope to test point TP (RF) and TP (VC) on BD board.
2. Press the I/⏻ button to turn the set ON.
3. Put disc (YEDS-18) in and playback 5 track.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note: Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

RF signal waveform



E-F Balance (1 Track Jump) check

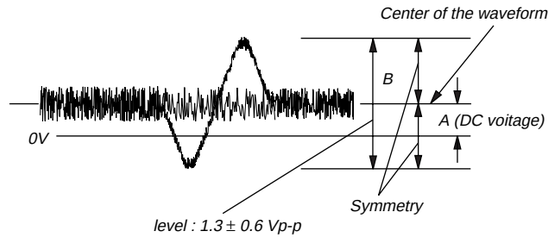


Procedure:

1. Connect oscilloscope to test point TP (TE) on BD board.
2. Press the I/⏻ button to turn the unit ON.
3. Put disc (YEDS-18) in to play the number five track.
4. Press the ▷II button.
5. Check the level B of the oscilloscope's waveform and the A (DC voltage) of the center of the Traverse waveform.
   Confirm the following:

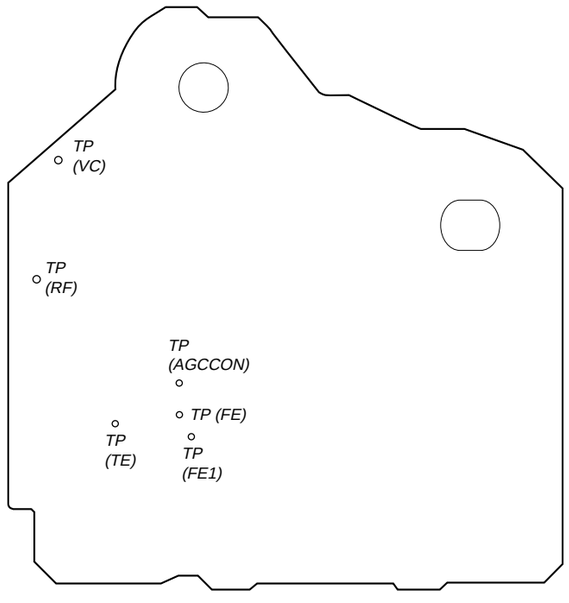
   • A/B x 100 = less then ± 22 (%)
   • B = 1.3 ± 0.6 Vp-p

1 track jump waveform



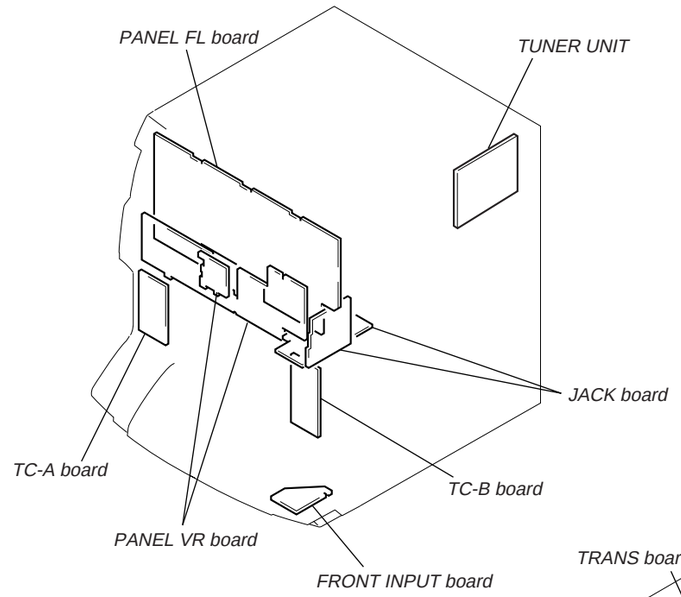
Adjustment Location :

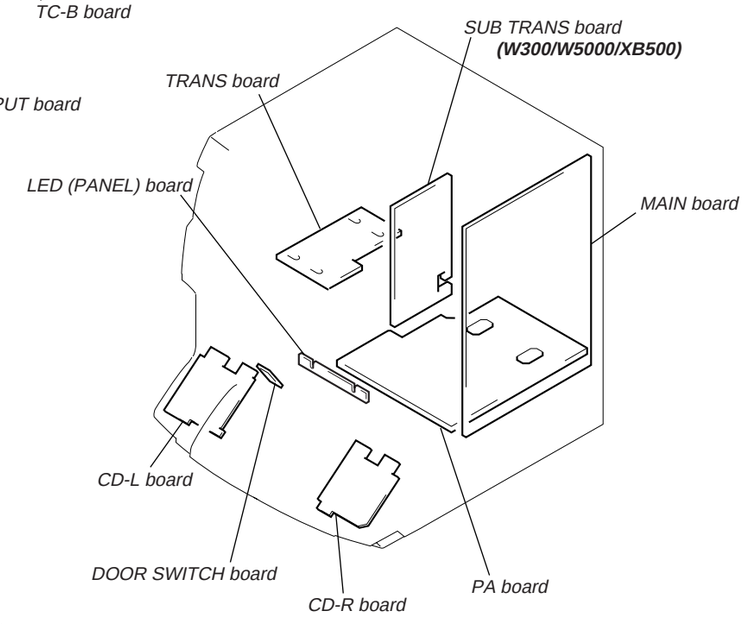
[BD BOARD] — SIDE A —

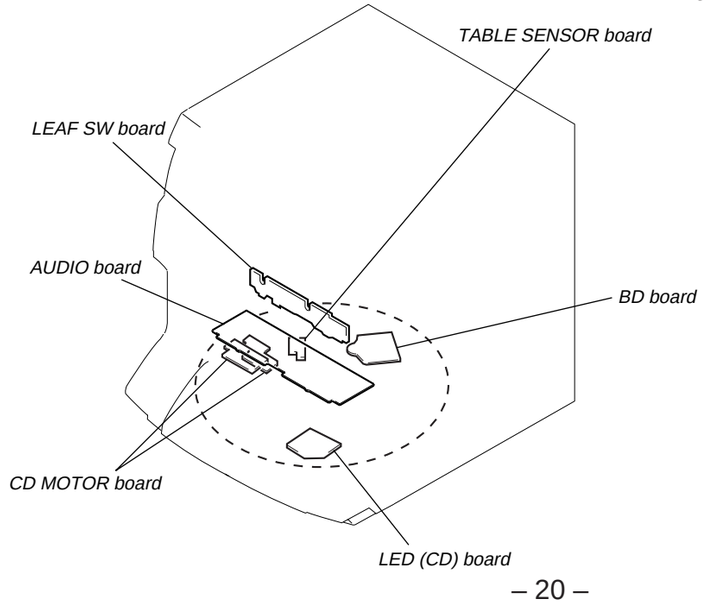


SECTION 7
DIAGRAMS

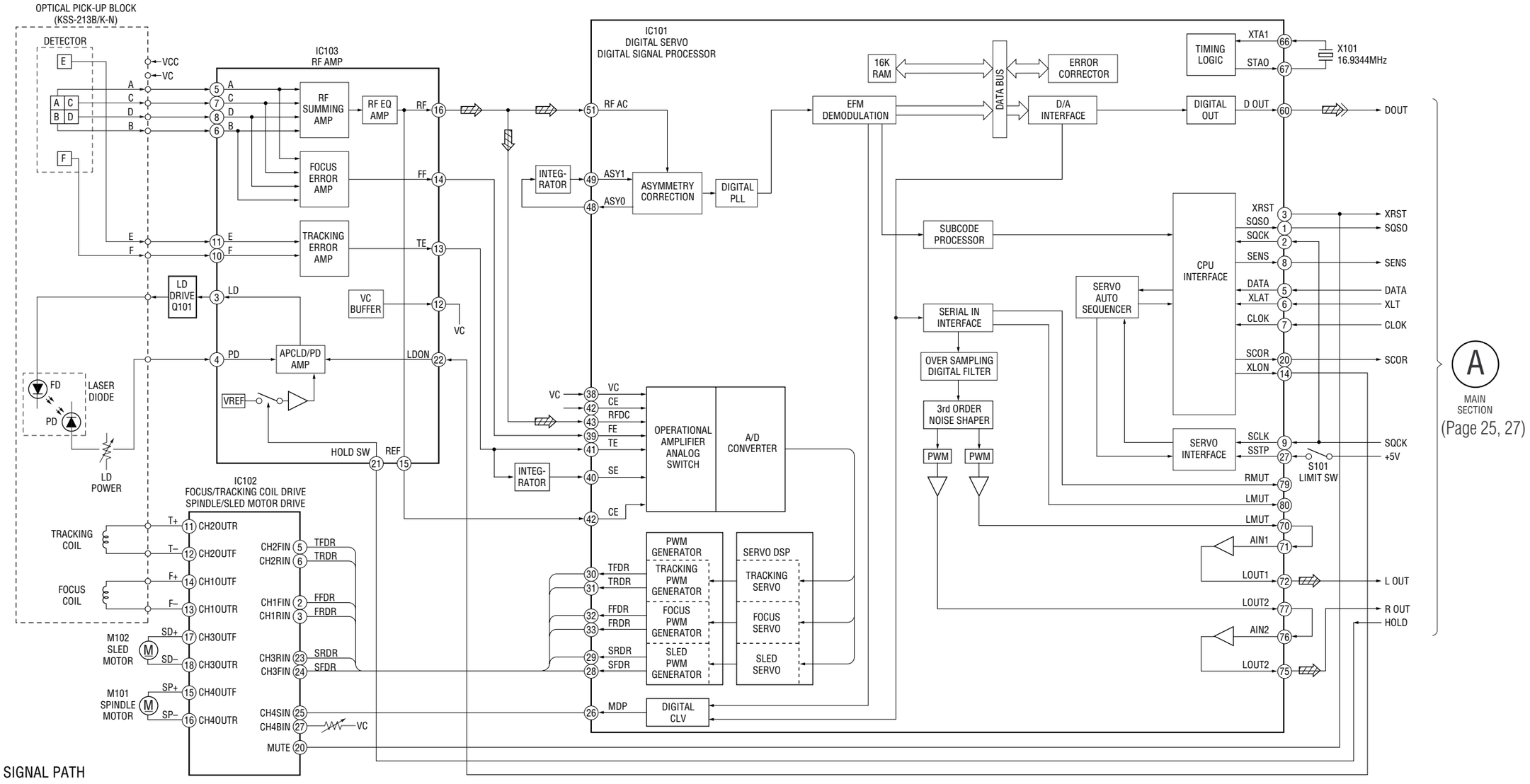
7-1. CIRCUIT BOARDS LOCATION







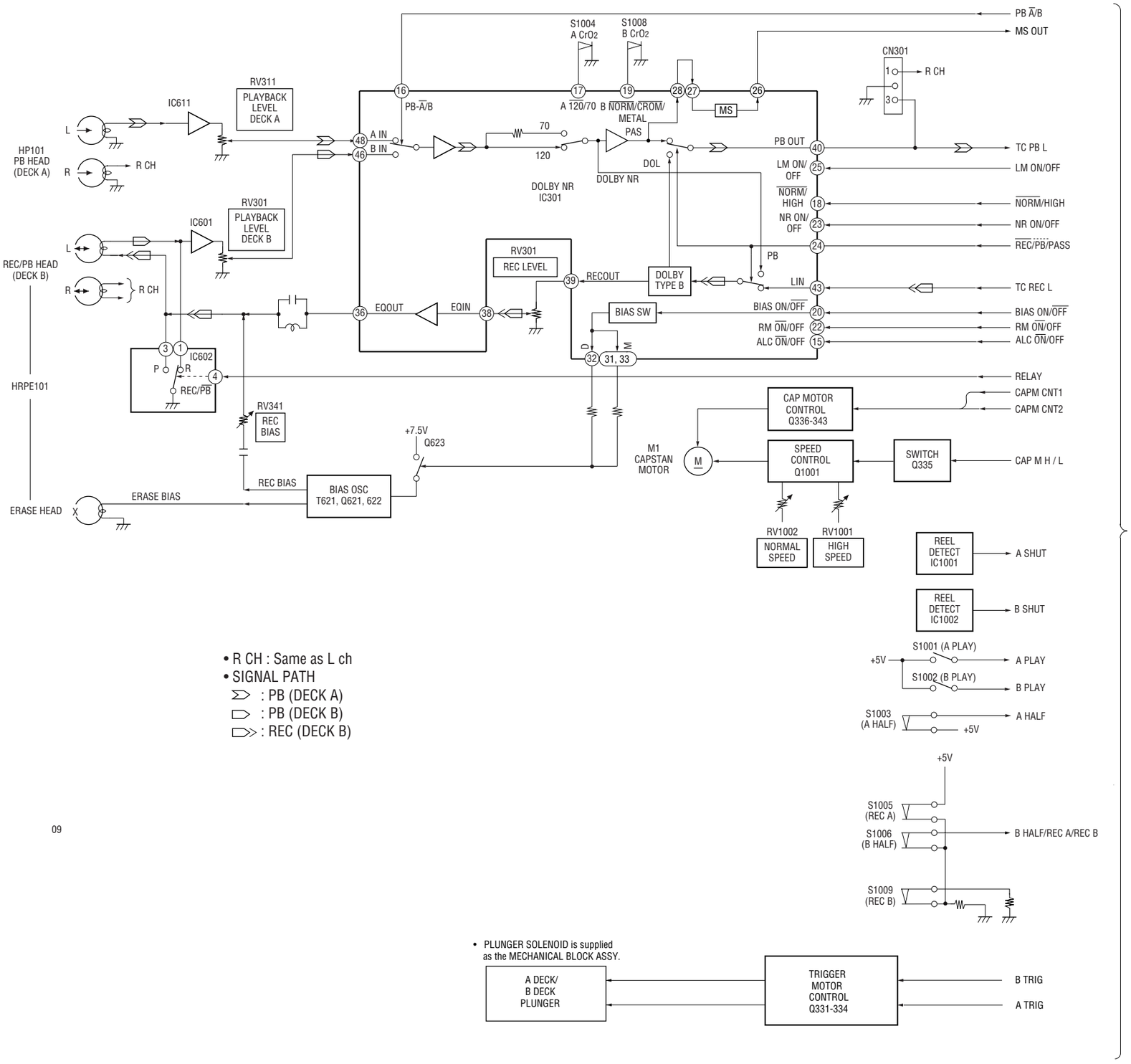
7-2. BLOCK DIAGRAMS
– BD (CD) SECTION –



• SIGNAL PATH
: CD
: Digital out

09

– DECK SECTION –

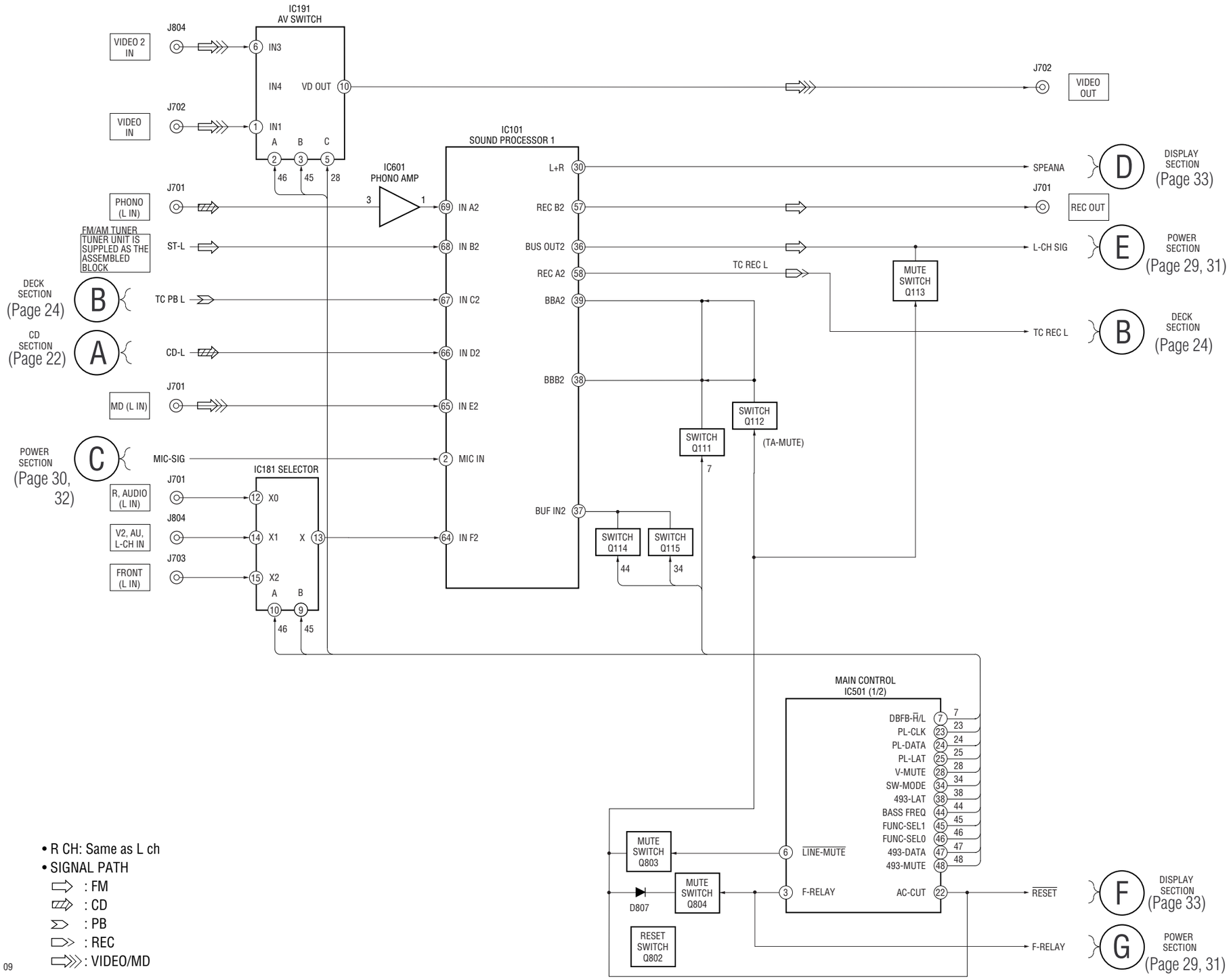


• R CH : Same as L ch
• SIGNAL PATH
  ≥> : PB (DECK A)
  ⊐> : PB (DECK B)
  ⊐≫ : REC (DECK B)

09

B
MAIN SECTION
(Page 25, 26, 27)

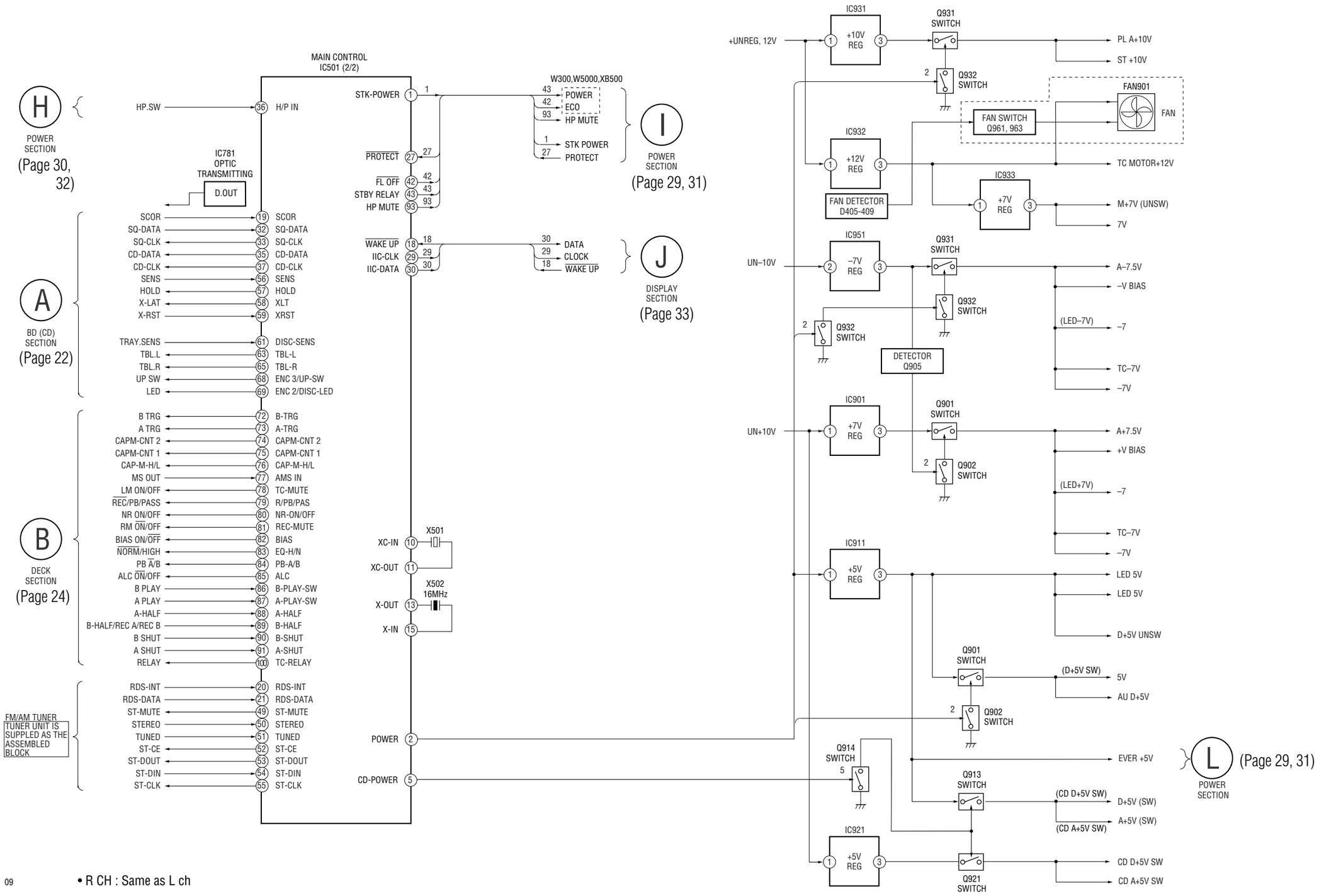
– MAIN (1/2) SECTION –



- R CH: Same as L ch
- SIGNAL PATH
  - ⇨ : FM
  - ⇨ : CD
  - ⇨ : PB
  - ⇨ : REC
  - ⇨ : VIDEO/MD

09

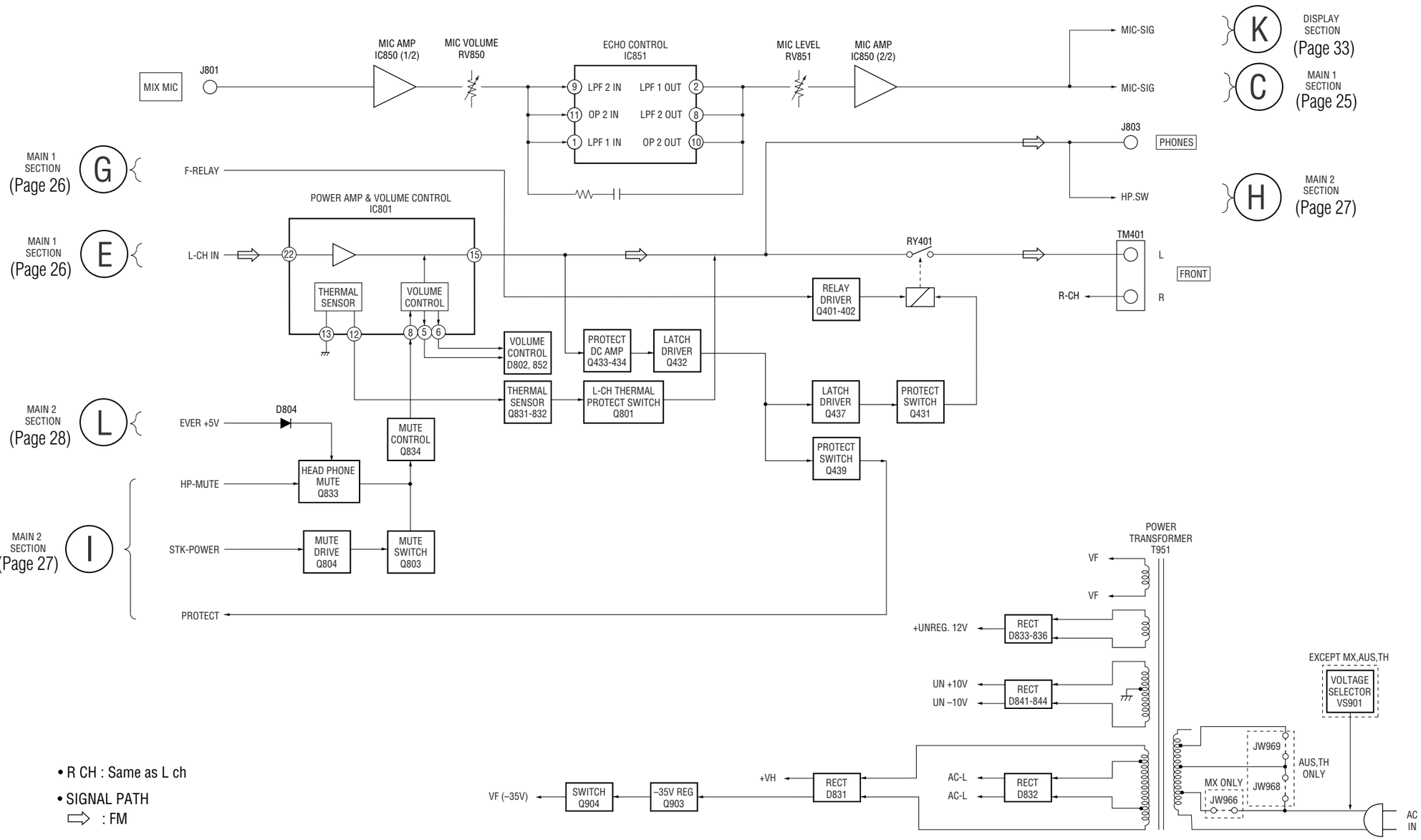
– MAIN (2/2) SECTION –



09

• R CH : Same as L ch

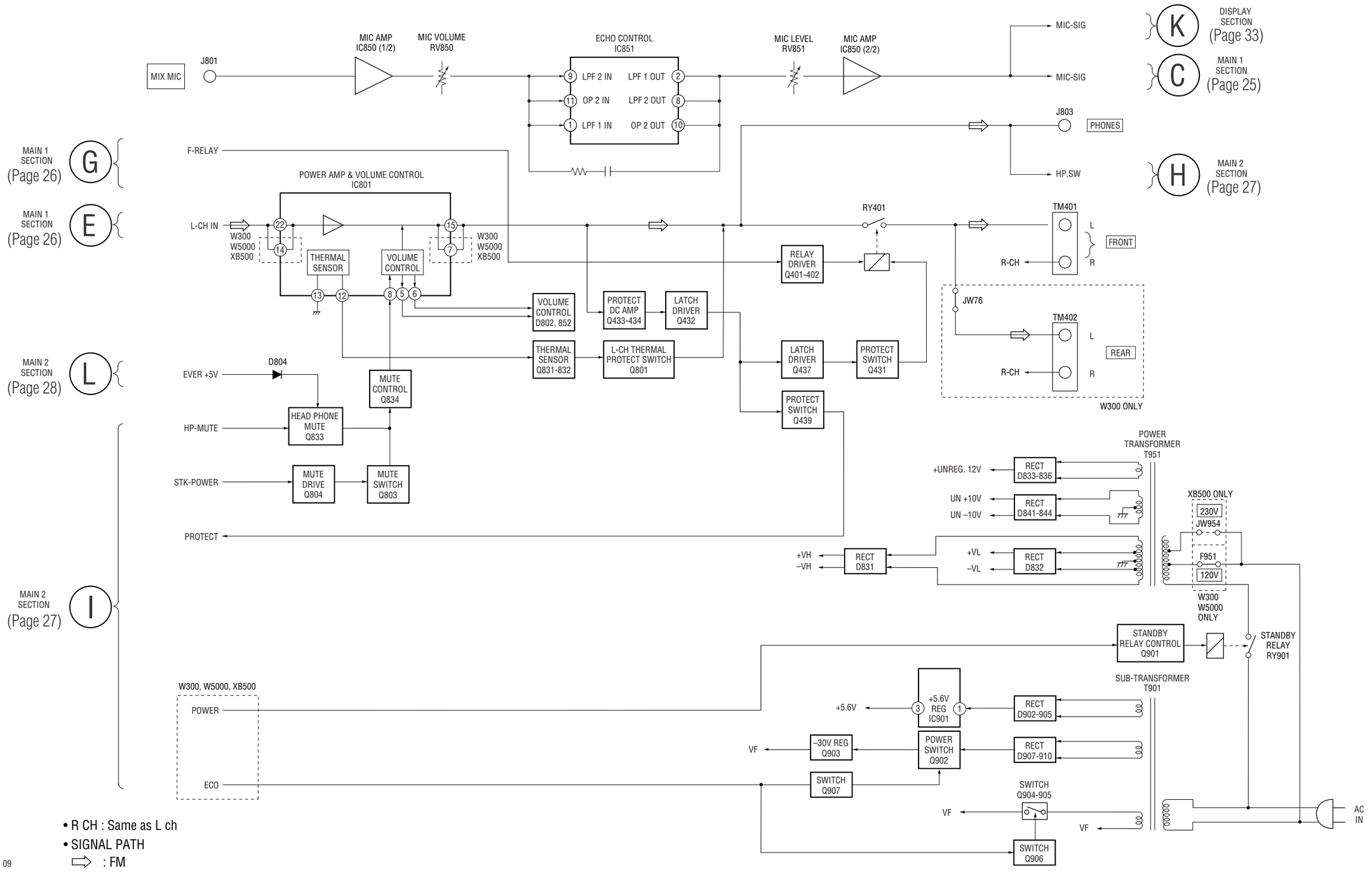
– POWER SECTION – (DR4, DR5, DR6, DR440 model)



- R CH : Same as L ch
- SIGNAL PATH
  ⇨ : FM

09

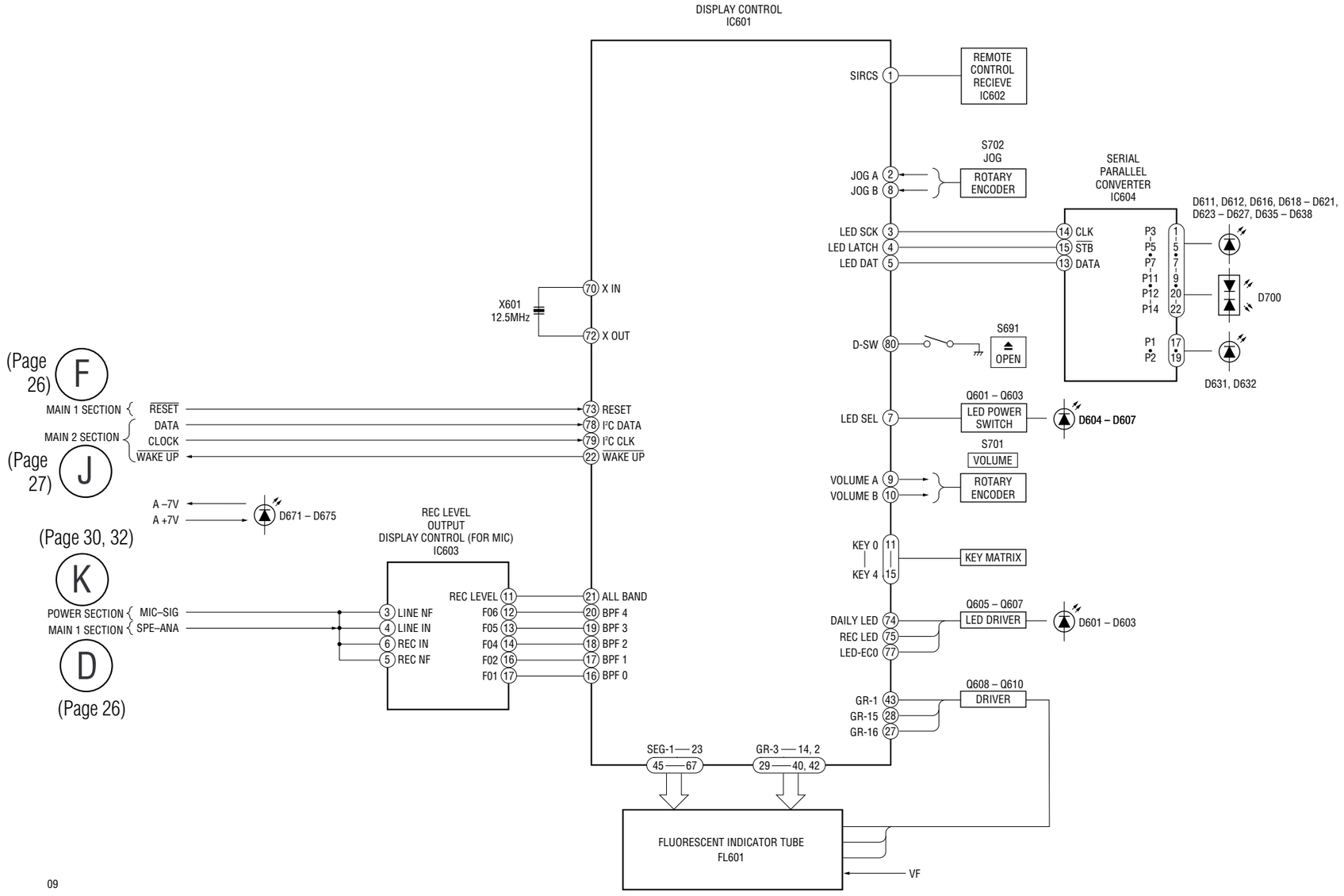
– POWER SECTION – (W300, W5000, XB500 model)



- R CH : Same as L ch
- SIGNAL PATH
  ⇨ : FM

09

– DISPLAY SECTION –



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- B+ : B+ Line.
- B– : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : FM
  - : VIDEO/MD
  - : PB (DECK A)
  - : PB (DECK B)
  - : REC (DECK B)
  - : CD
  - : digital out
  - : PHONO
- Abbreviation
  CND : Canadian model.
  AUS : Australian model.

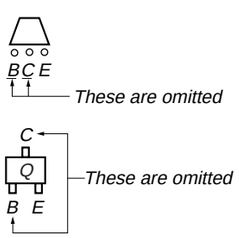
For printed wiring boards.

Note:

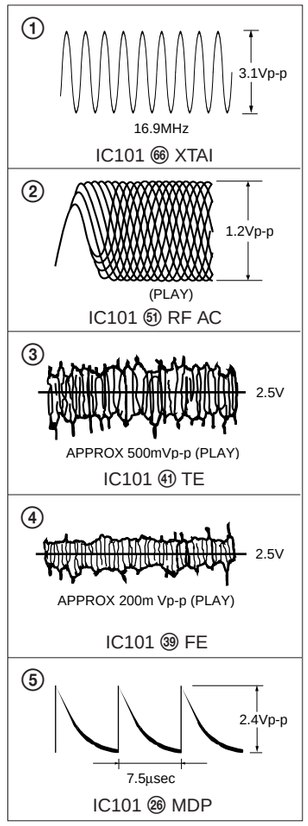
- ○——— : parts extracted from the component side.
- ○ : Through hole.
- △ : internal component.
- ▒▒ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

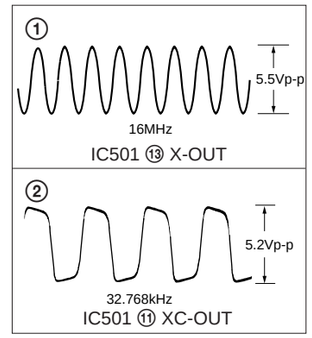
- **Indication of transistor**



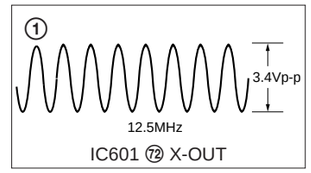
WAVEFORMS
– BD (CD) SECTION –



– MAIN (2/5) SECTION –



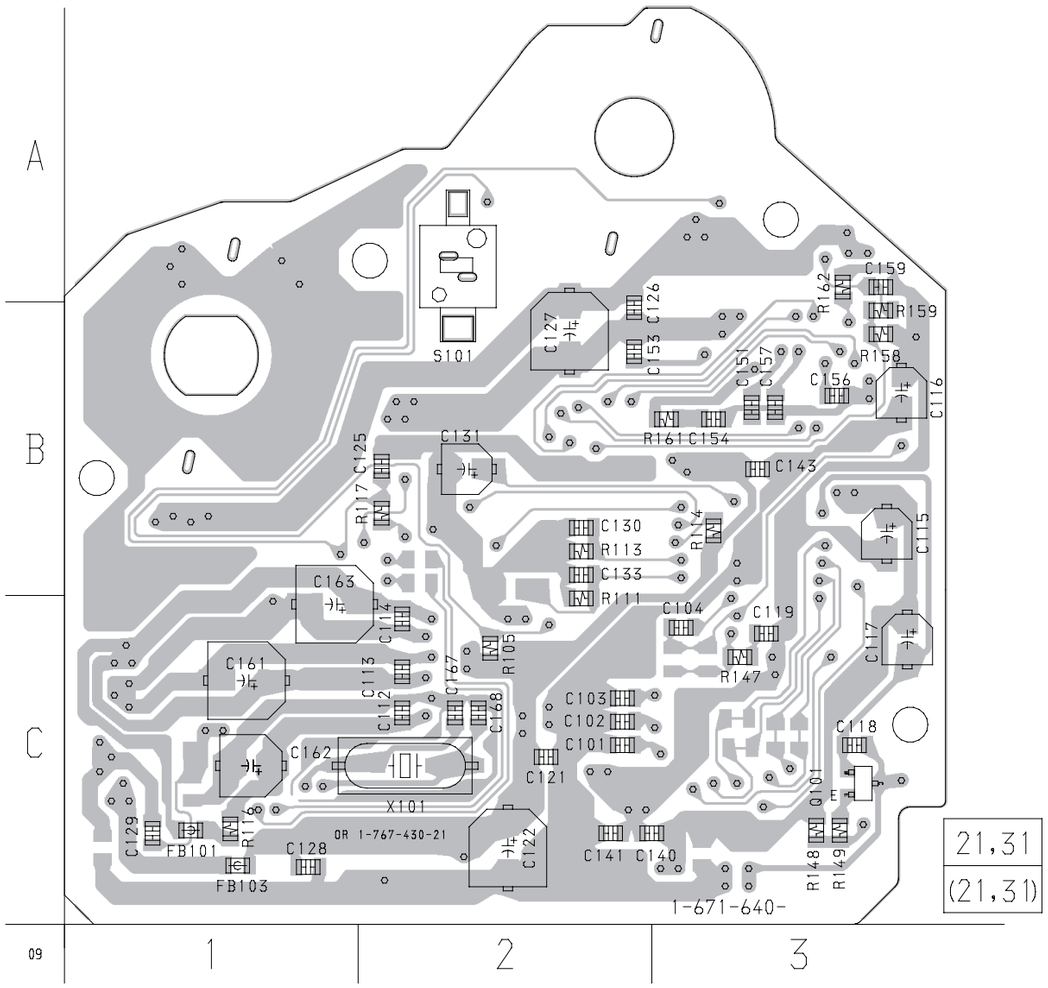
– PANEL FL SECTION –



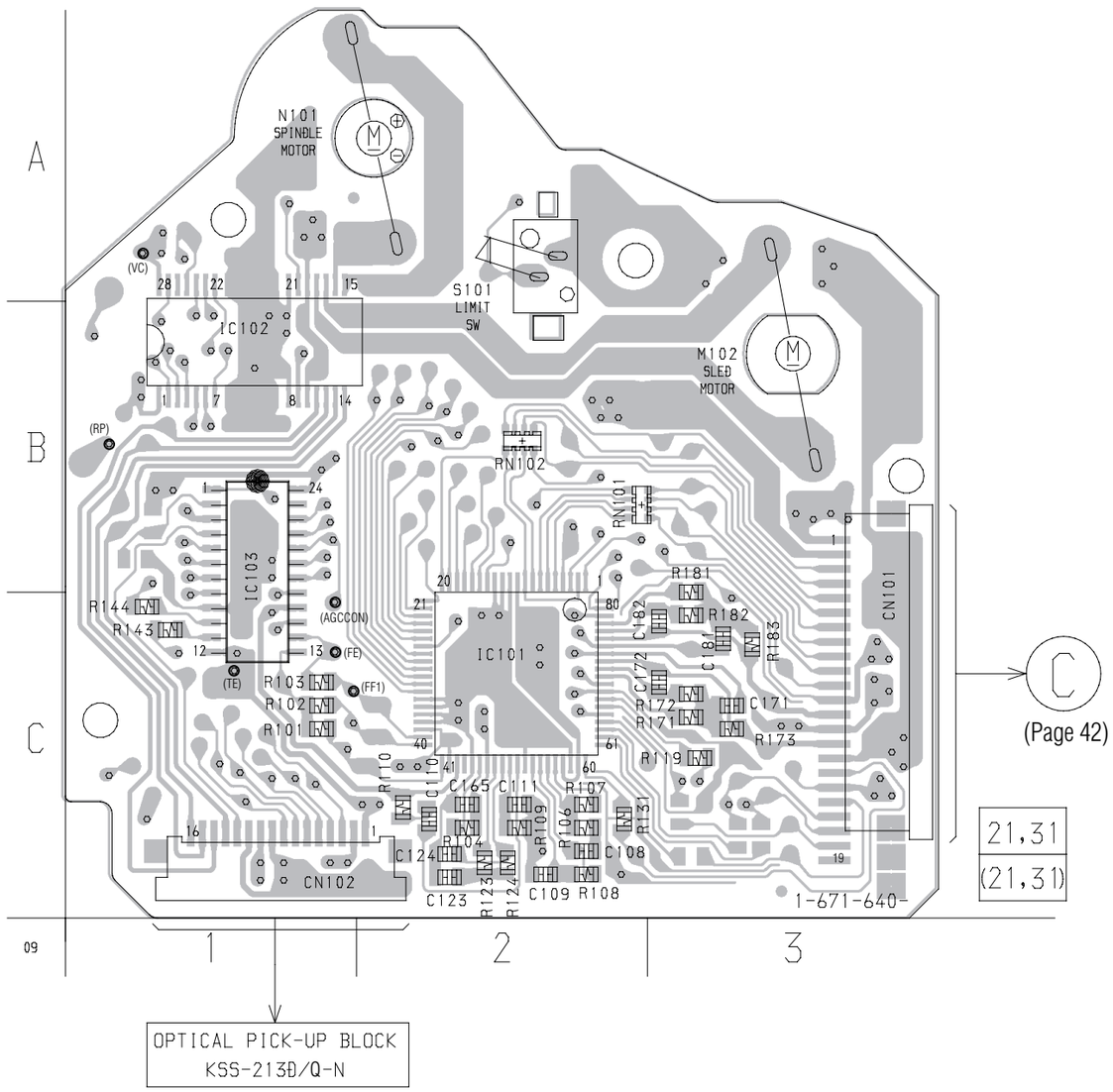
7-3. PRINTED WIRING BOARD – BD (CD) SECTION –

• See page 20 for Circuit Boards Location.

【 BD (CD) BOARD 】(SIDE A)

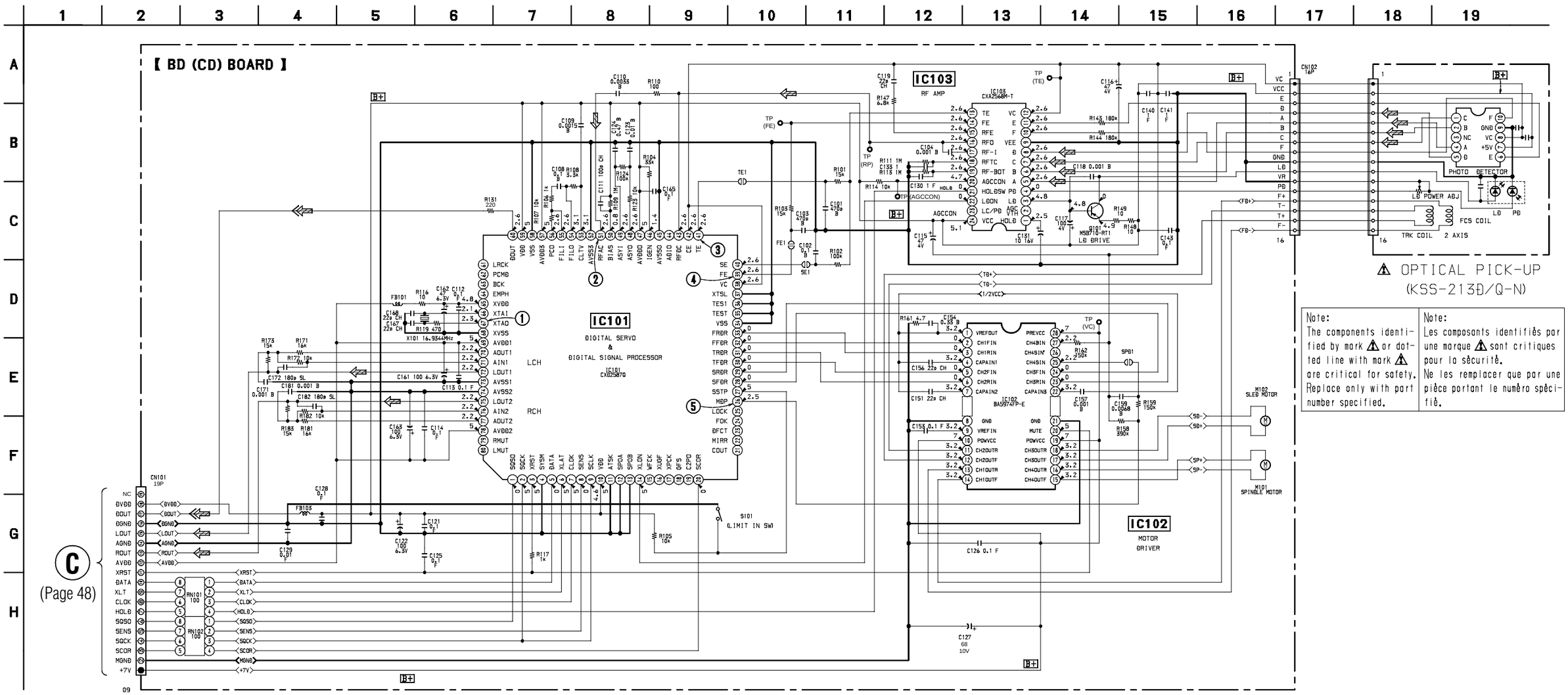


【 BD (CD) BOARD 】(SIDE B)



7-4. SCHEMATIC DIAGRAM – BD (CD) SECTION –

• See page 36 for Waveforms.

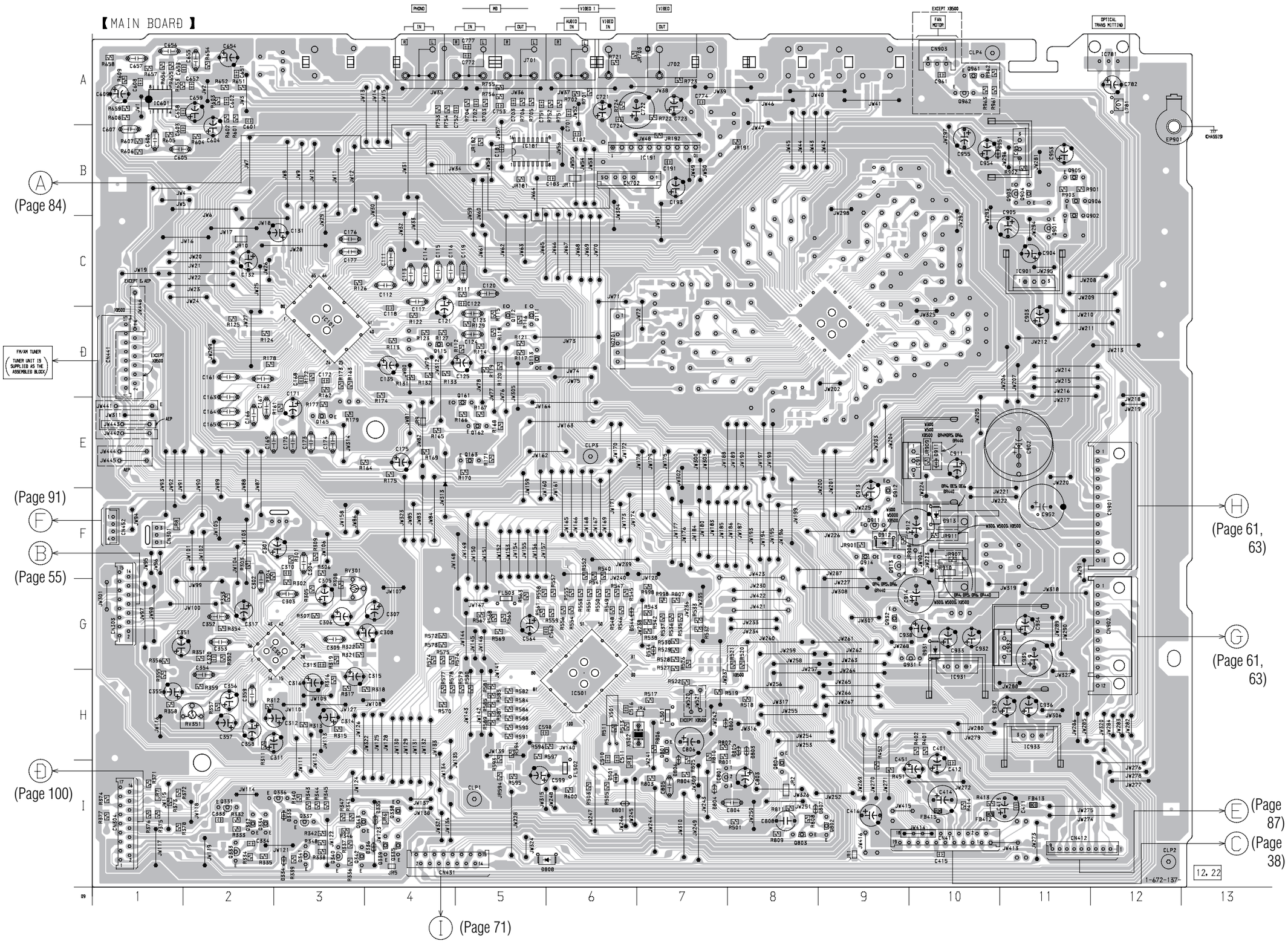

【 BD (CD) BOARD 】
IC101
DIGITAL SERVO & DIGITAL SIGNAL PROCESSOR
IC103
RF AMP
IC102
MOTOR DRIVER
IC105 CXA2568M-T
IC102 BA5974FP-E
CN101 19P
CN102 16P
M102 SLED MOTOR
M101 SPINDLE MOTOR
S101 (LIMIT IN SW)
PHOTO DETECTOR
LD POWER ADJ
FCS COIL
TRK COIL
2 AXIS
LD DRIVE
OPTICAL PICK-UP (KSS-213D/Q-N)
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.
Note: Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
(Page 48)

- **Semiconductor Location**

Ref. No.	Location
D333	I-3
D334	J-3
D335	I-4
D336	I-4
D501	I-6
D534	G-7
D802	H-8
D803	H-8
D804	H-7
D805	H-8
D806	H-7
D807	I-9
D808	J-6
D911	E-10
D912	F-9
D913	F-10
D931	G-10
D951	B-11
IC101	D-3
IC181	B-5
IC191	B-7
IC301	G-3
IC501	H-6
IC601	A-1
IC901	C-11
IC931	G-10
IC932	G-11
IC933	H-11
IC951	B-11
IC801	I-8
IC911	E-10
Q111	D-5
Q112	D-5
Q113	D-5
Q115	D-4
Q161	E-5
Q162	E-5
Q163	E-5
Q165	E-3
Q331	I-2
Q332	I-2
Q333	J-2
Q334	I-2
Q335	J-4
Q336	I-3
Q337	I-3
Q338	I-4
Q339	J-4
Q340	J-3
Q341	J-3
Q342	J-3
Q343	I-3
Q801	H-7
Q802	I-9
Q803	I-8
Q804	I-8
Q901	C-11
Q902	B-11
Q903	B-11
Q904	B-11
Q905	B-11
Q906	B-11
Q911	F-9
Q912	F-9
Q913	F-9
Q914	F-9
Q931	G-10
Q932	G-9
Q961	A-10
Q962	A-10

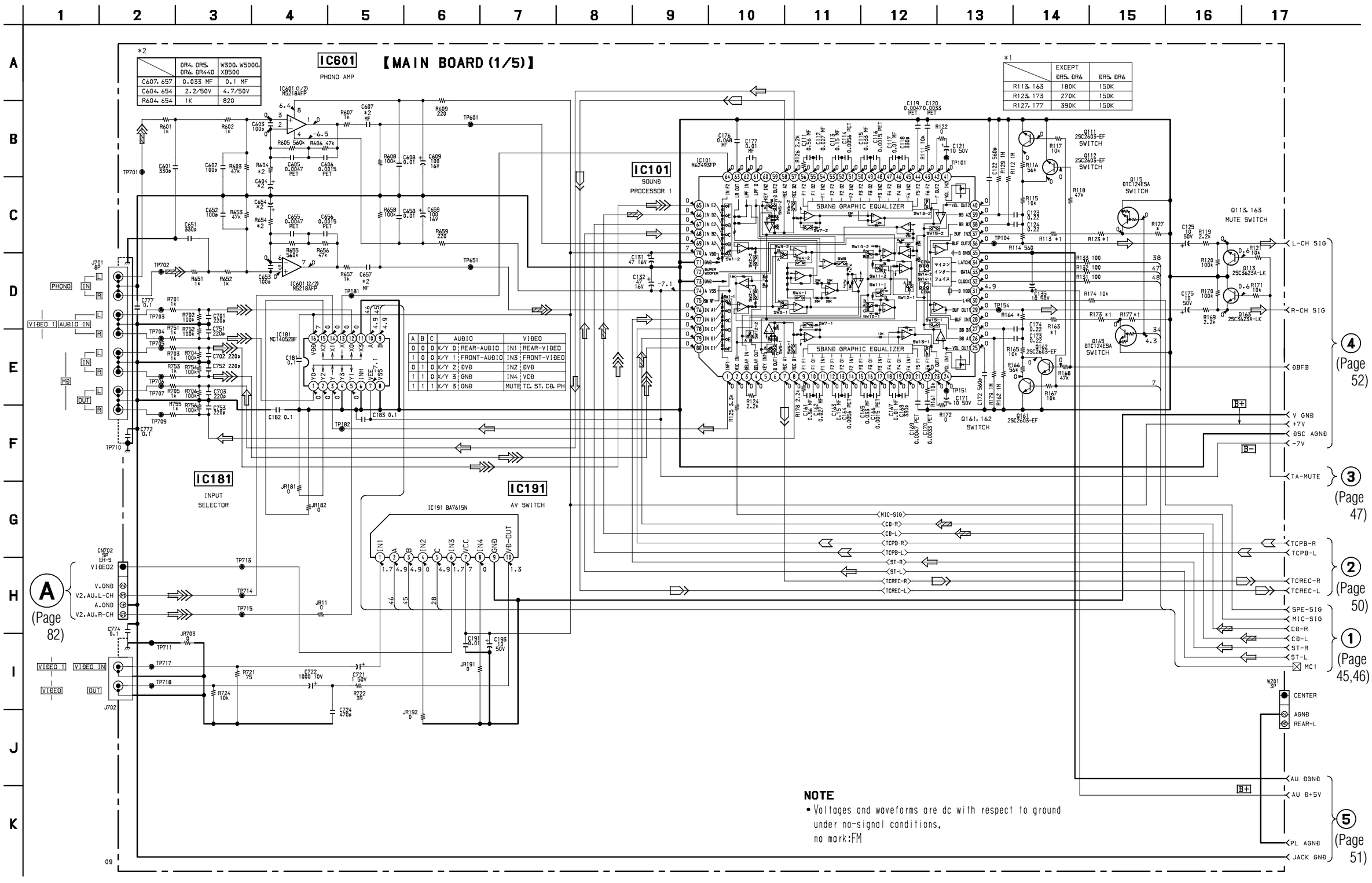
7-5. PRINTED WIRING BOARD – MAIN SECTION –

• See page 20 for Circuit Boards Location.



7-6. SCHEMATIC DIAGRAM – MAIN (1/5) SECTION –

• See page 101 for IC Block Diagrams.



*2	ØR4, ØR5, ØR6, ØR440	W300, W5000, XB500
C607, 657	0.033 MF	0.1 MF
C604, 654	2.2/50V	4.7/50V
R604, 654	1K	820

*1	EXCEPT ØR5, ØR6	ØR5, ØR6
R113, 163	180K	150K
R123, 173	270K	150K
R127, 177	390K	150K

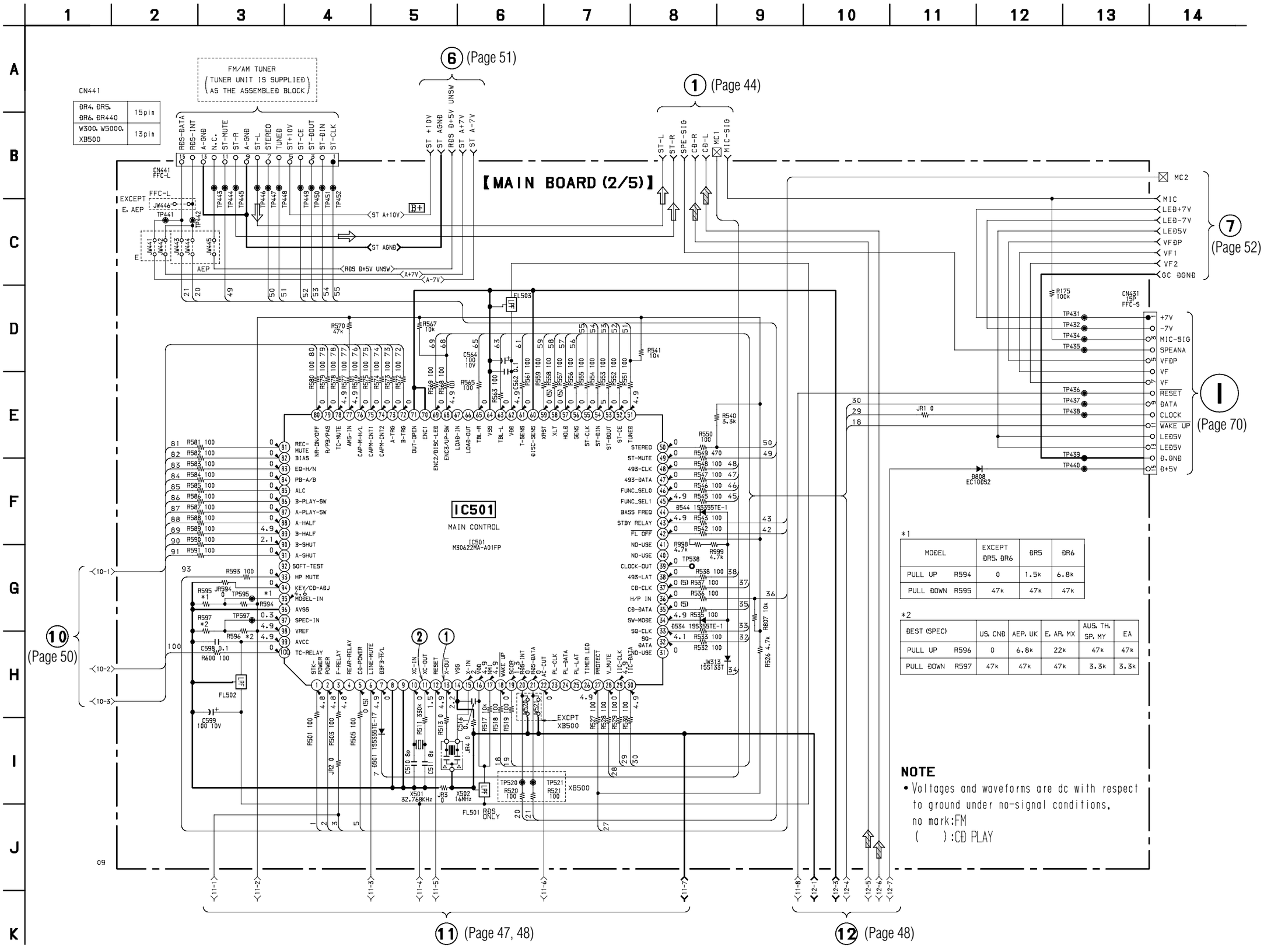
A	B	C	AUDIO	VIDEO
0	0	0	X/Y 0 : REAR-AUDIO	IN1 : REAR-VIDEO
1	0	0	X/Y 1 : FRONT-AUDIO	IN3 : FRONT-VIDEO
0	1	0	X/Y 2 : ØVD	IN2 : ØVD
1	1	0	X/Y 3 : GNØ	IN4 : VCØ
1	1	1	X/Y 3 : GNØ	MUTE : TC, ST, CØ, PH

NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

7-7. SCHEMATIC DIAGRAM – MAIN (2/5) SECTION –

- See page 36 for Waveforms.
- See page 41 for Printed Wiring Board.
- See page 102 for IC Pin Functions.



*1

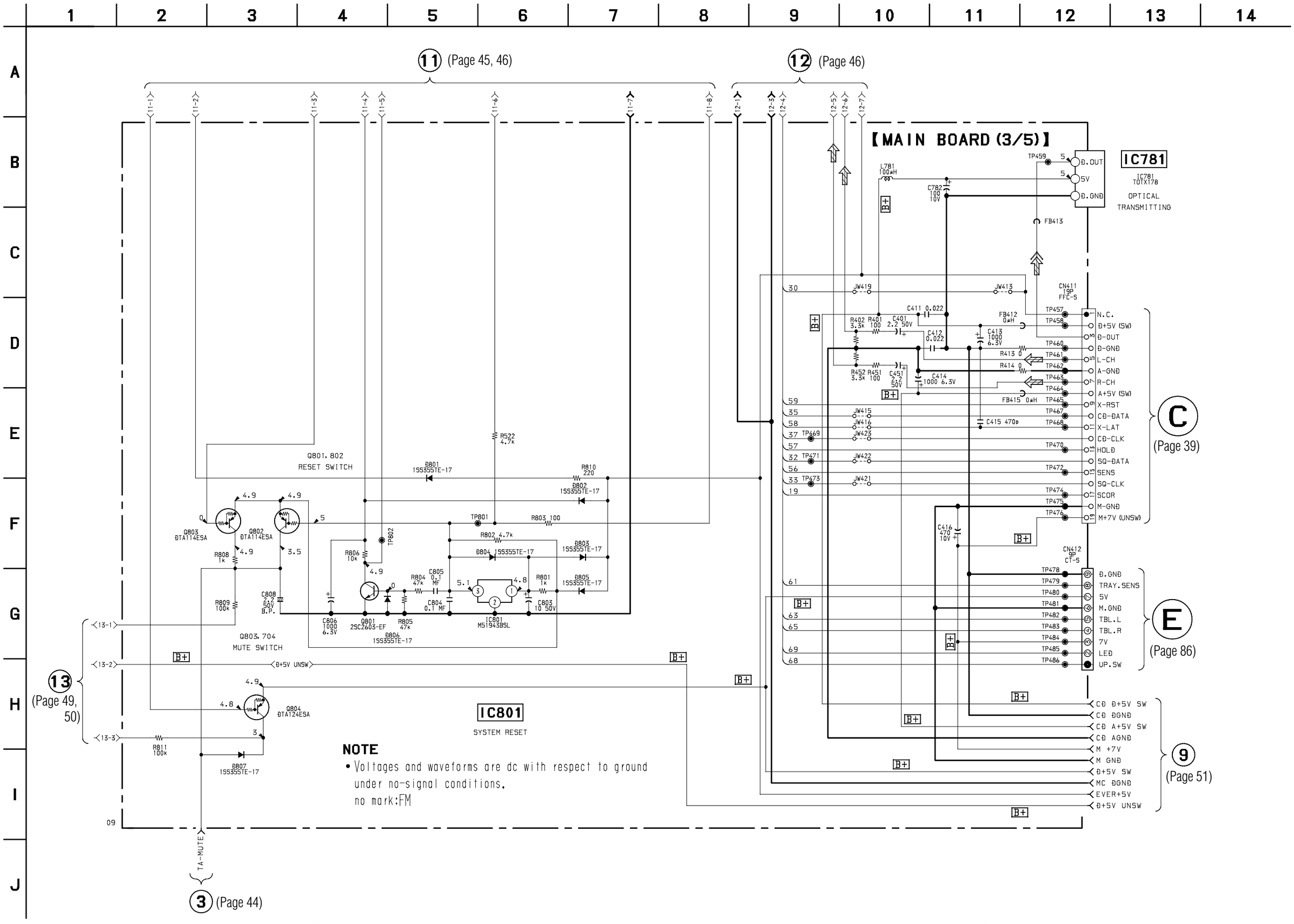
MODEL	EXCEPT ÐR5, ÐR6	ÐR5	ÐR6
PULL UP R594	0	1.5k	6.8k
PULL ÐOWN R595	47k	47k	47k

*2

ÐEST (SPEC)	US, CNÐ	AEP, UK	E, AR, MX	AUS, TH, SP, MY	EA
PULL UP R596	0	6.8k	22k	47k	47k
PULL ÐOWN R597	47k	47k	47k	3.3k	3.3k

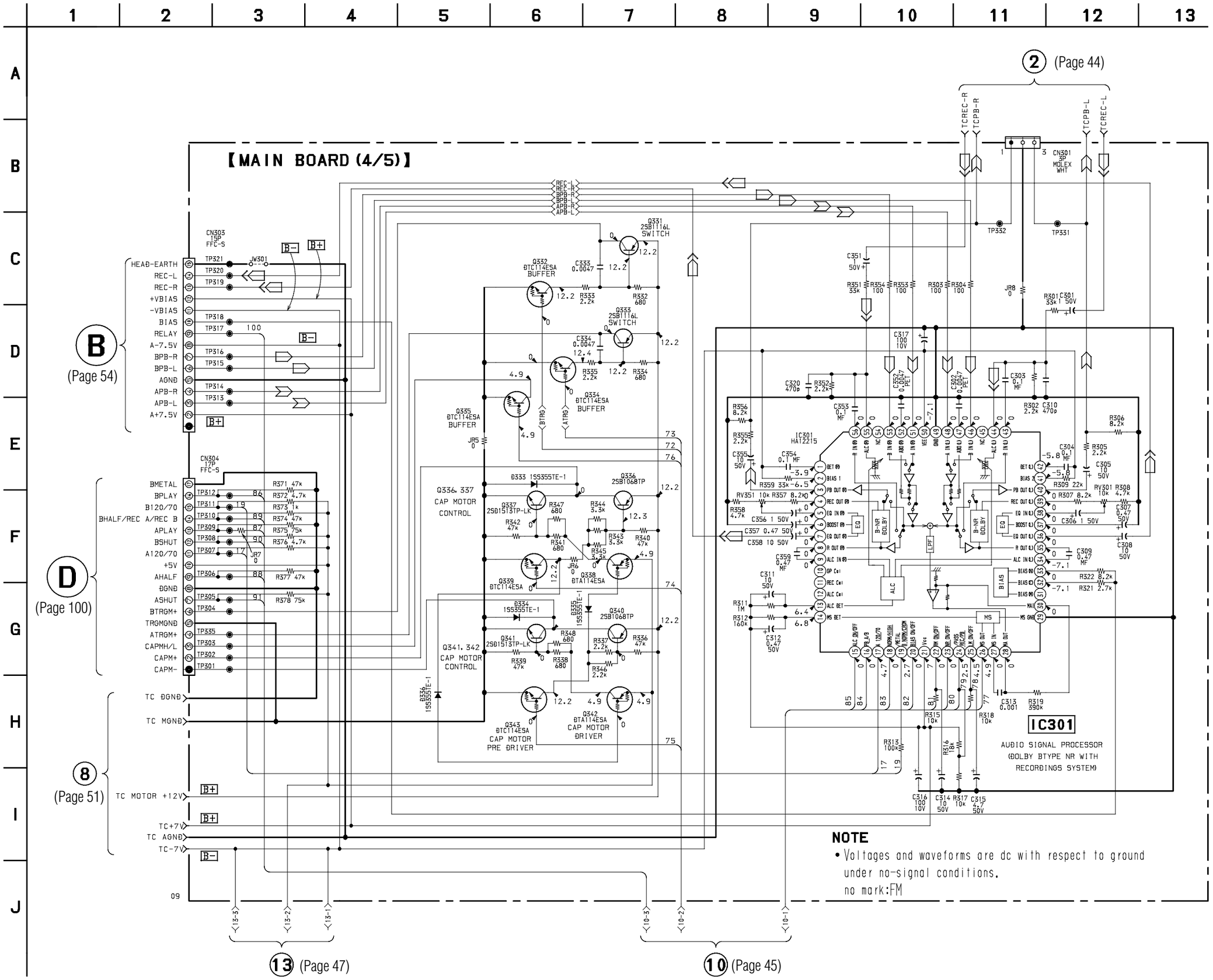
7-8. SCHEMATIC DIAGRAM – MAIN (3/5) SECTION –

• See page 41 for Printed Wiring Board.



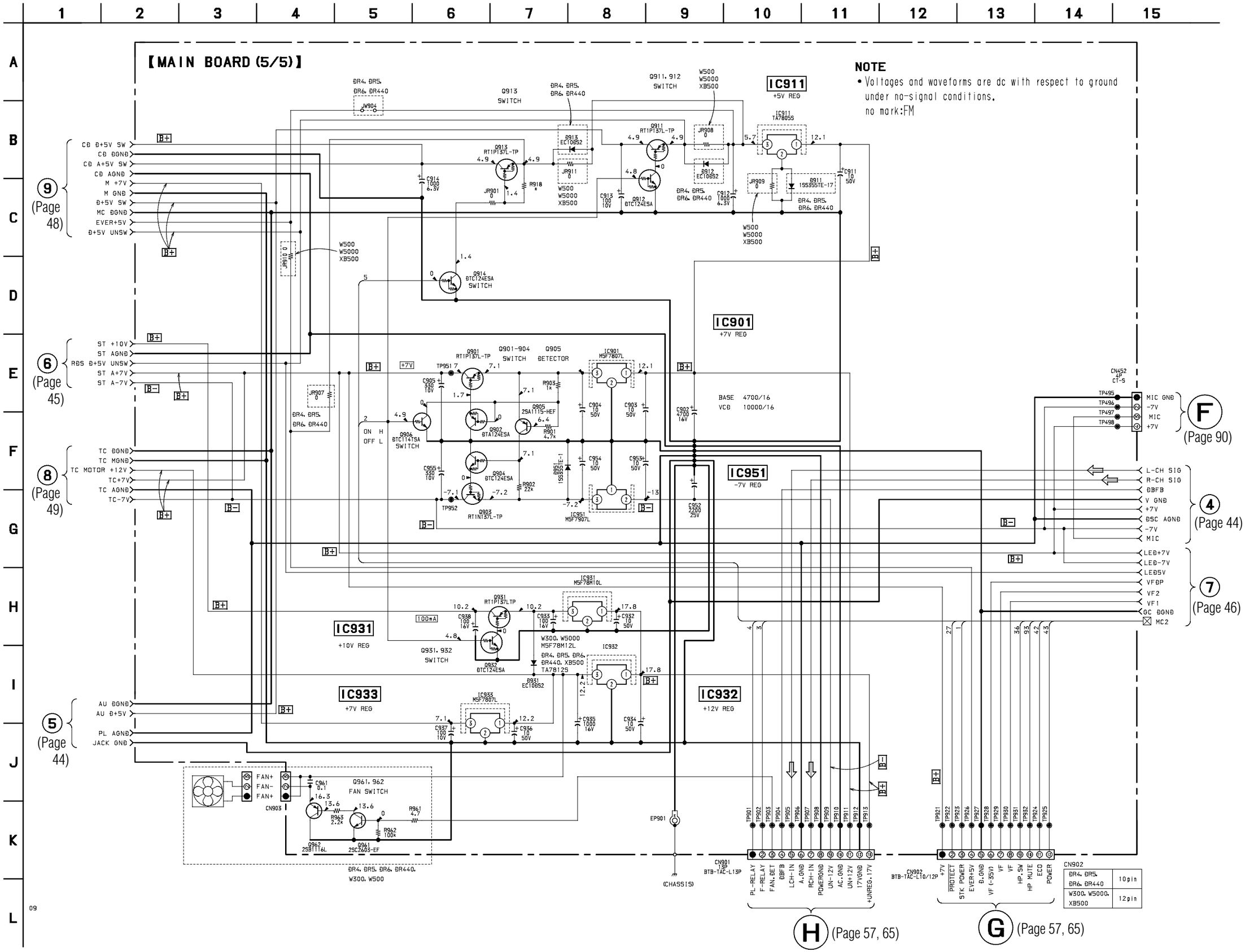
7-9. SCHEMATIC DIAGRAM – MAIN (4/5) SECTION –

• See page 41 for Printed Wiring Board.

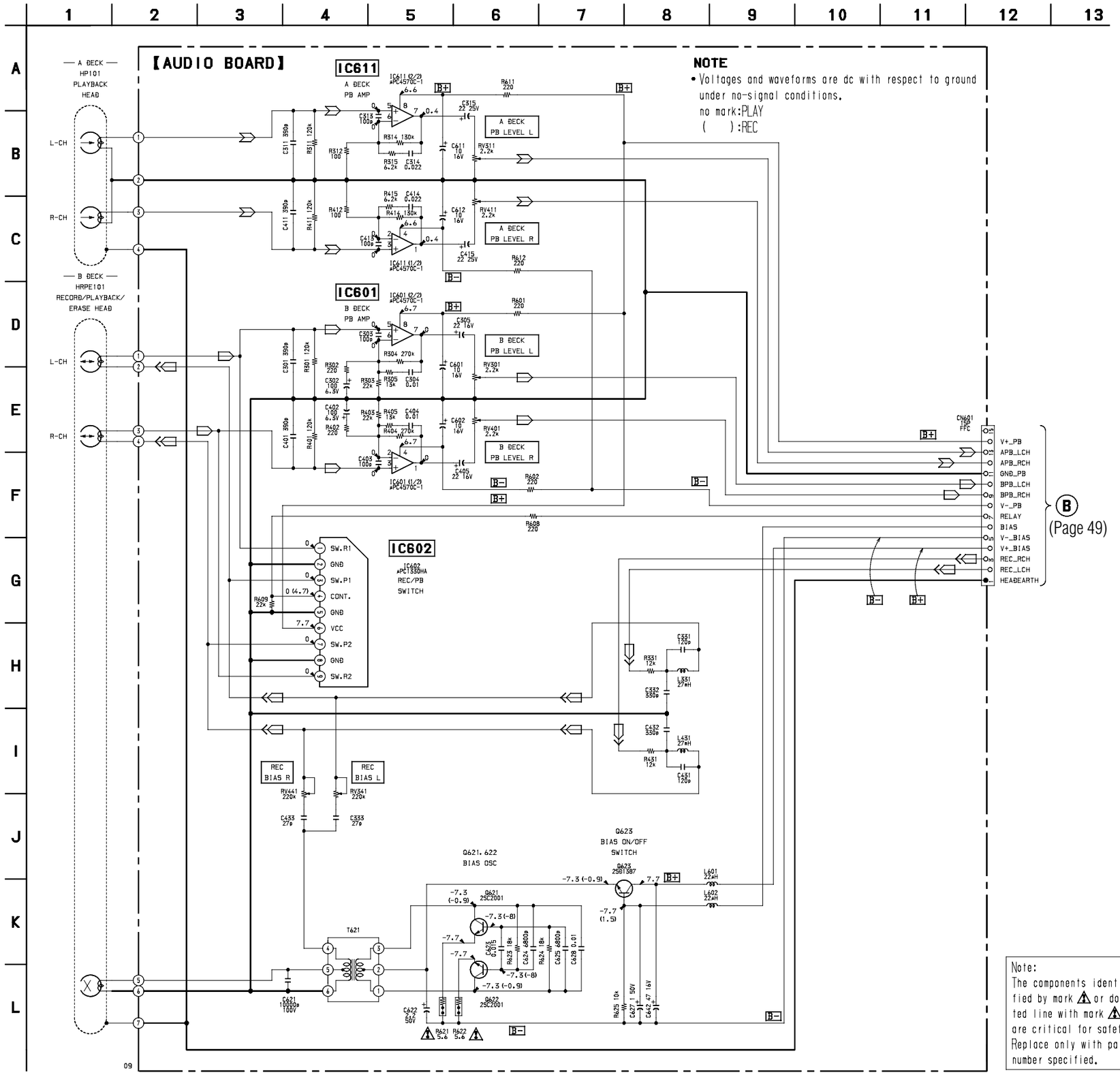


7-10. SCHEMATIC DIAGRAM – MAIN (5/5) SECTION –

• See page 41 for Printed Wiring Board.



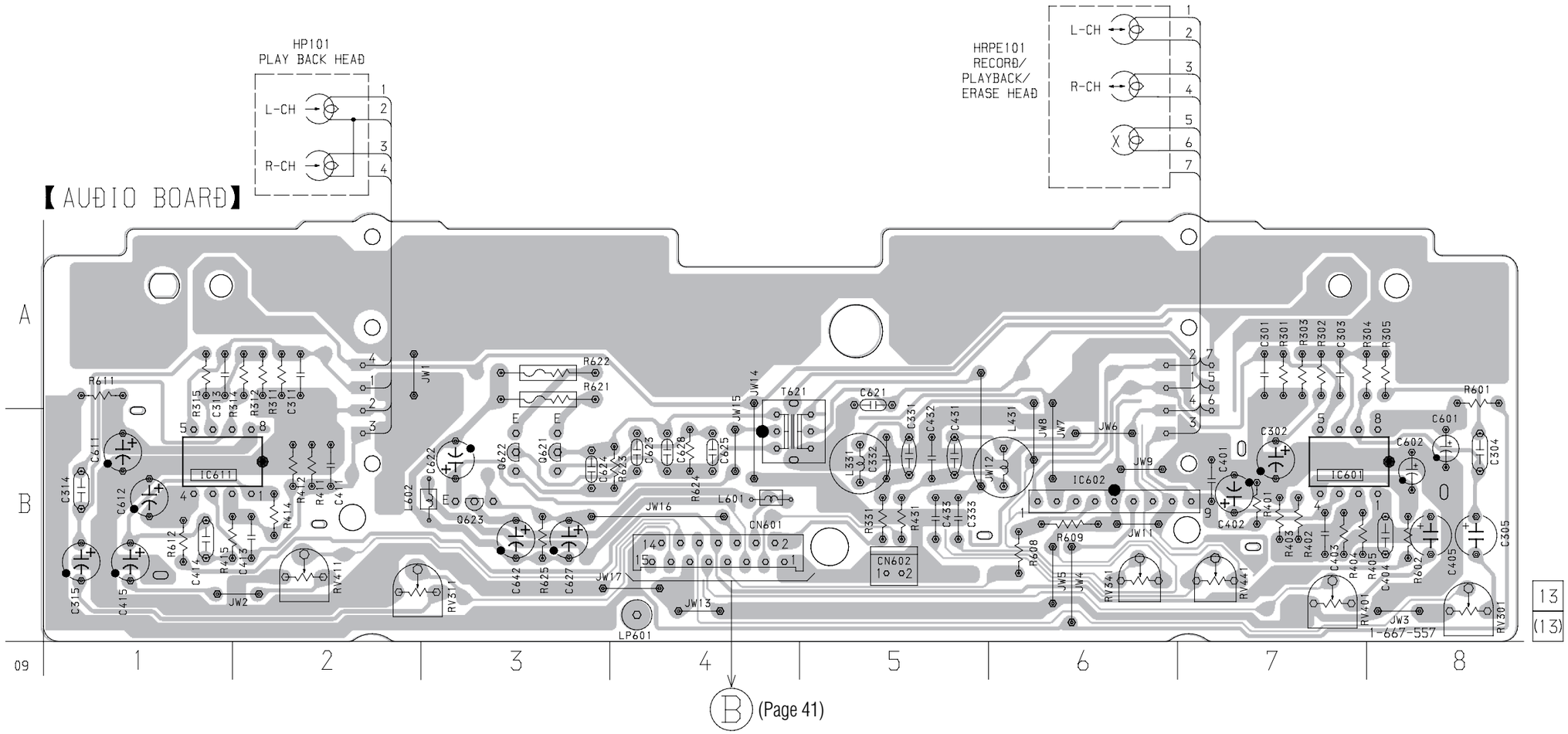
7-11. SCHEMATIC DIAGRAM – DECK SECTION –



Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

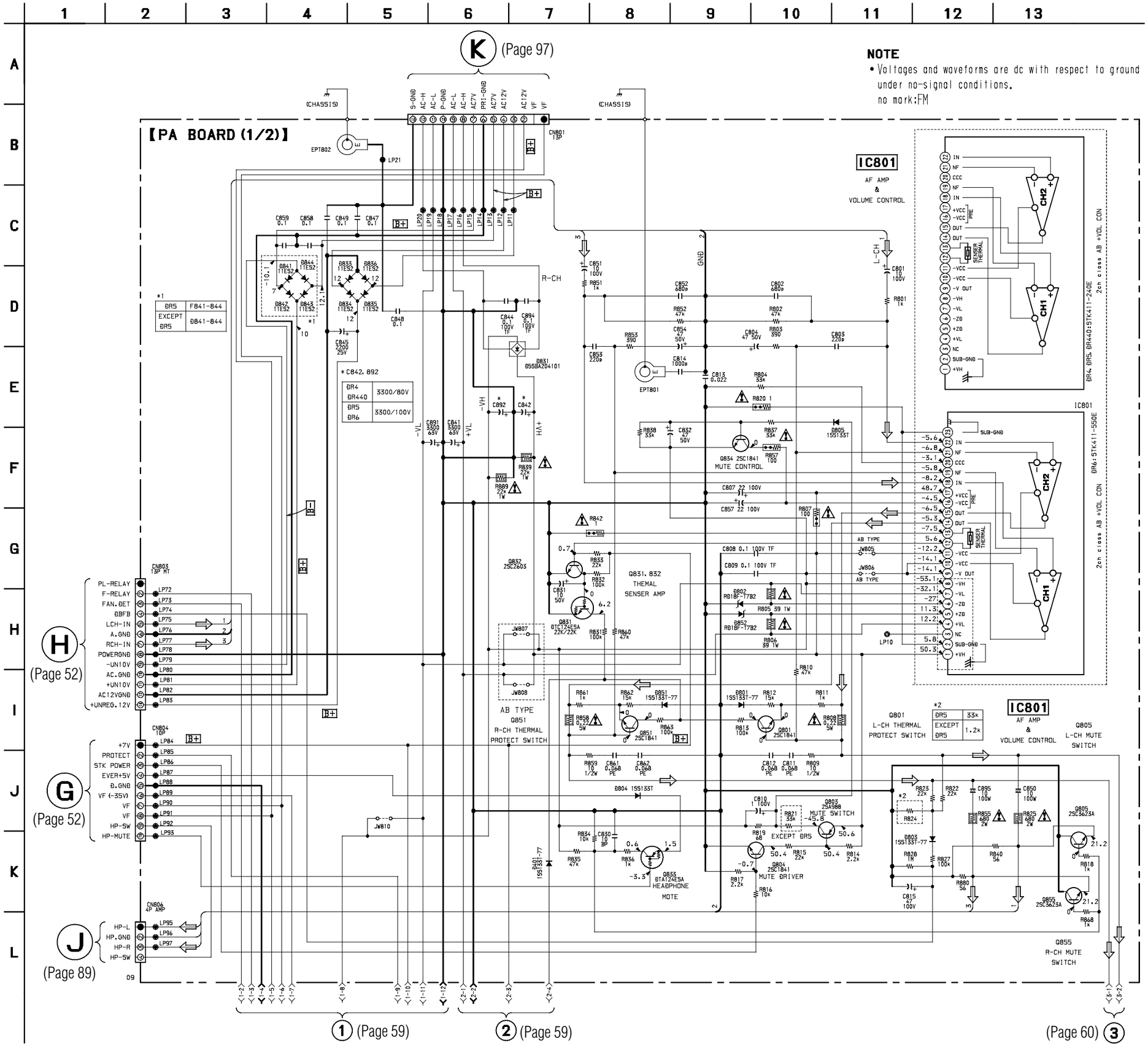
7-12. PRINTED WIRING BOARD – DECK SECTION –

• See page 20 for Circuit Boards Location.



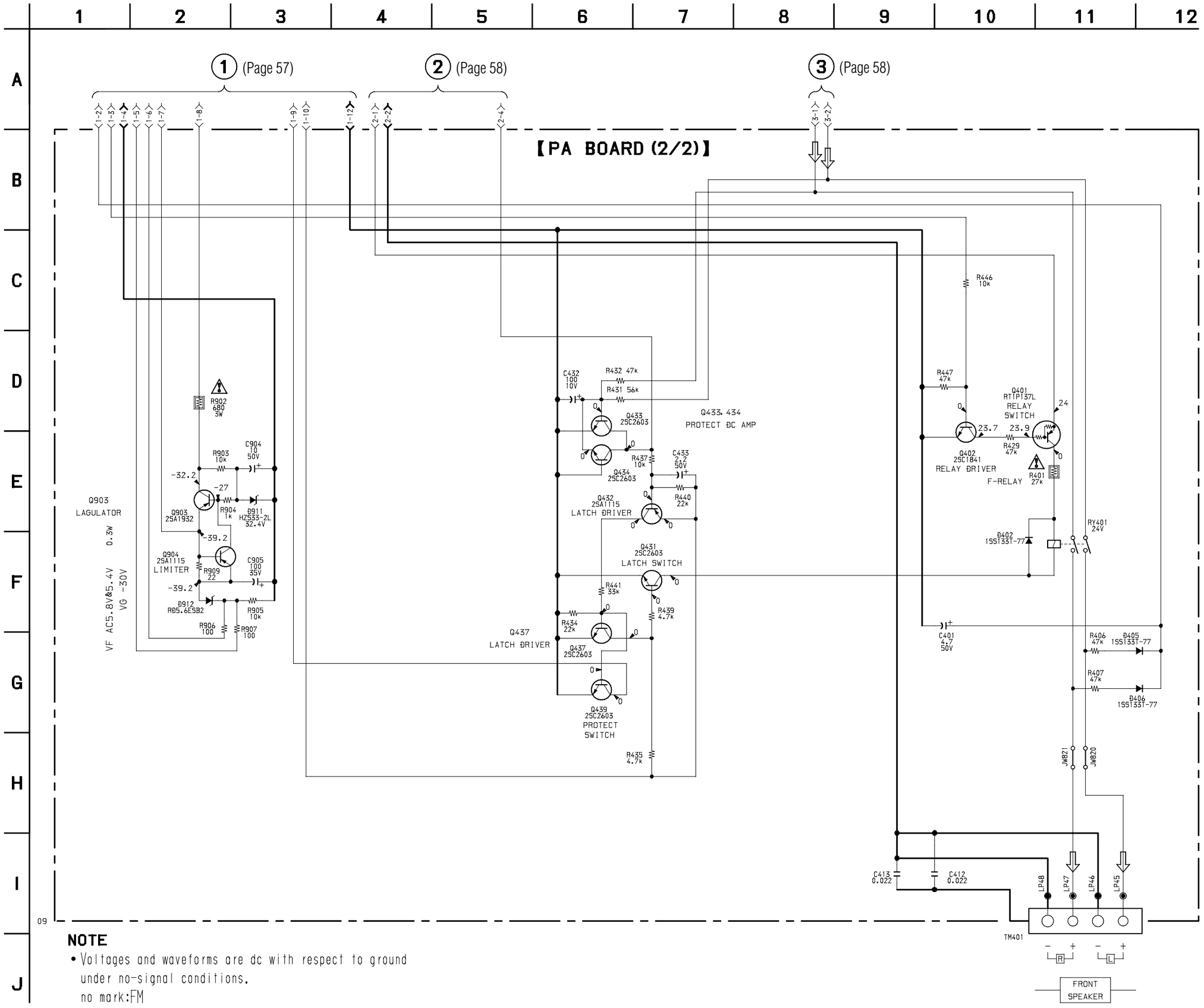
7-13. SCHEMATIC DIAGRAM – POWER (1/2) SECTION – (DR4, DR5, DR6, DR440 model)

• See page 61 for Printed Wiring Board.



7-14. SCHEMATIC DIAGRAM – POWER (2/2) SECTION – (DR4, DR5, DR6, DR440 model)

• See page 61 for Printed Wiring Board.

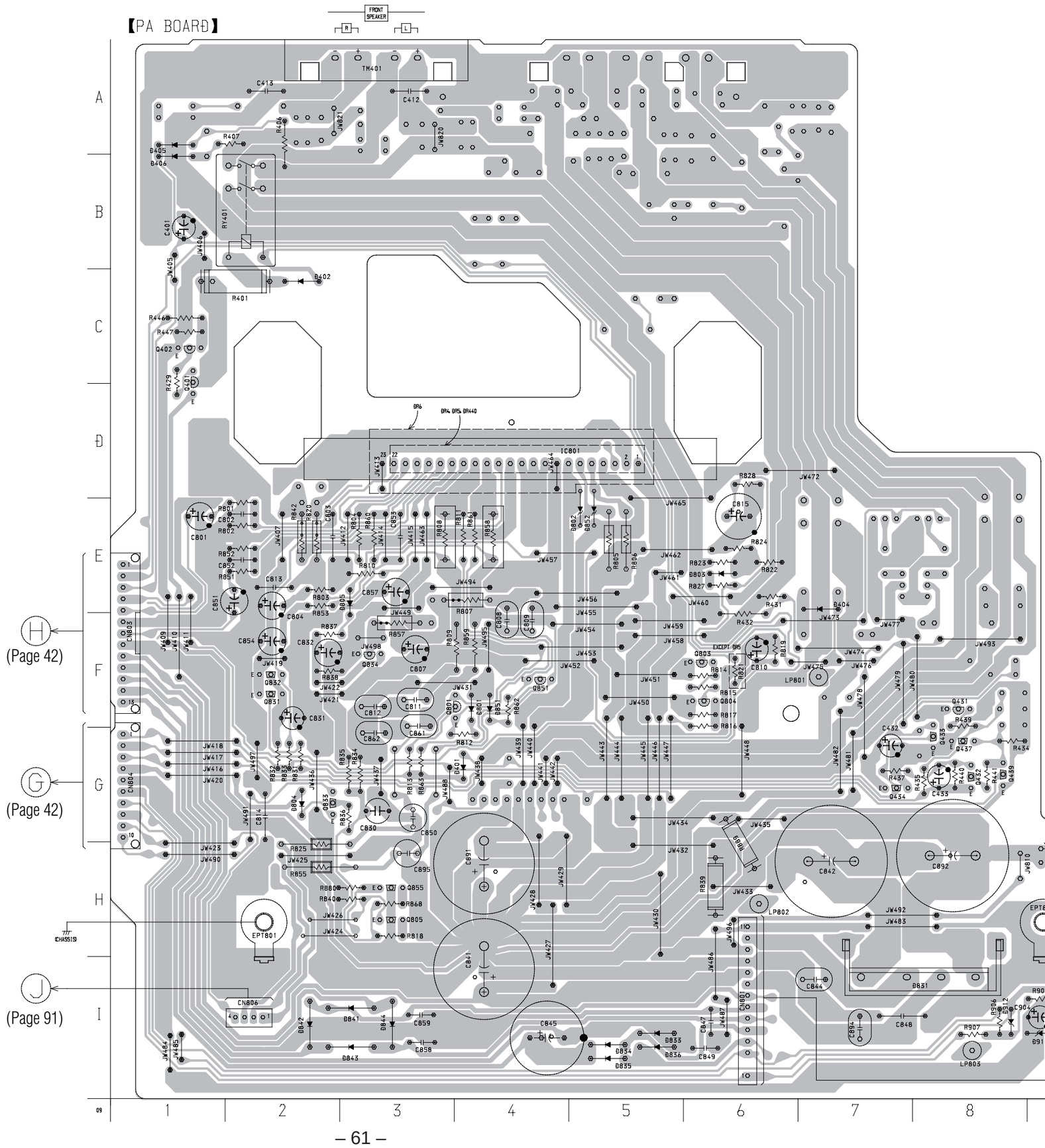


NOTE

• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark:FM

7-15. PRINTED WIRING BOARD – POWER SECTION – (DR4, DR5, DR6, DR440 model)

• See page 20 for Circuit Boards Location.

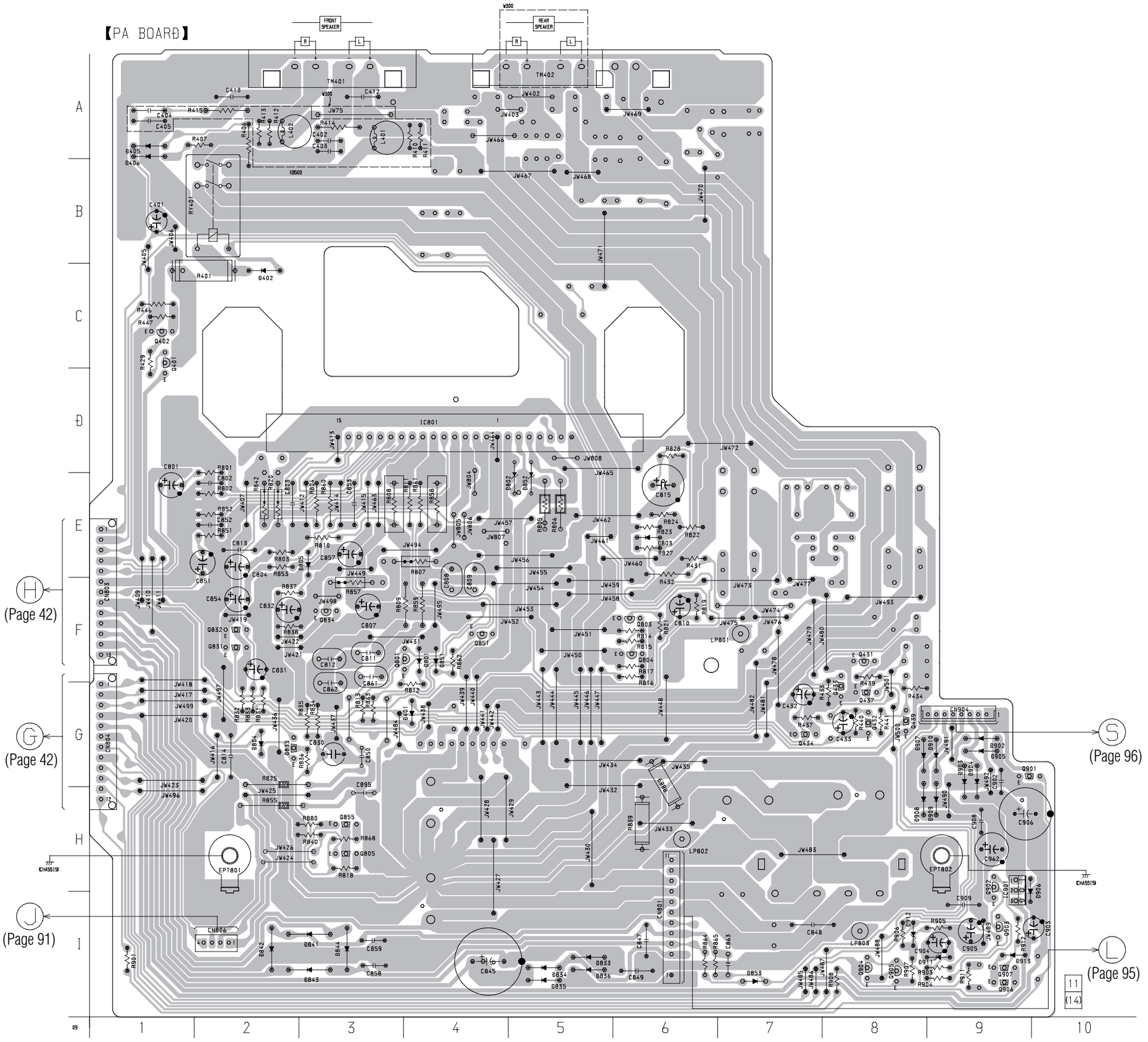


• **Semiconductor Location**

Ref. No.	Location
D401	G-4
D402	C-2
D405	A-1
D406	B-1
D801	F-4
D802	E-5
D803	E-6
D823	
D831	I-8
D833	I-5
D834	I-5
D835	I-5
D836	I-5
D841	I-3
D842	I-2
D843	I-3
D844	I-3
D851	F-4
D852	E-5
D911	I-9
D912	I-8
IC801	
Q401	C-1
Q402	C-1
Q431	F-8
Q432	G-8
Q433	G-8
Q434	G-7
Q437	G-8
Q439	G-8
Q801	F-4
Q803	F-6
Q804	F-6
Q805	H-3
Q831	F-2
Q832	F-2
Q833	G-2
Q834	F-3
Q851	F-4
Q855	H-3
Q903	I-9

7-16. PRINTED WIRING BOARD – POWER SECTION – (W300, W5000, XB500 model)

• See page 20 for Circuit Boards Location.

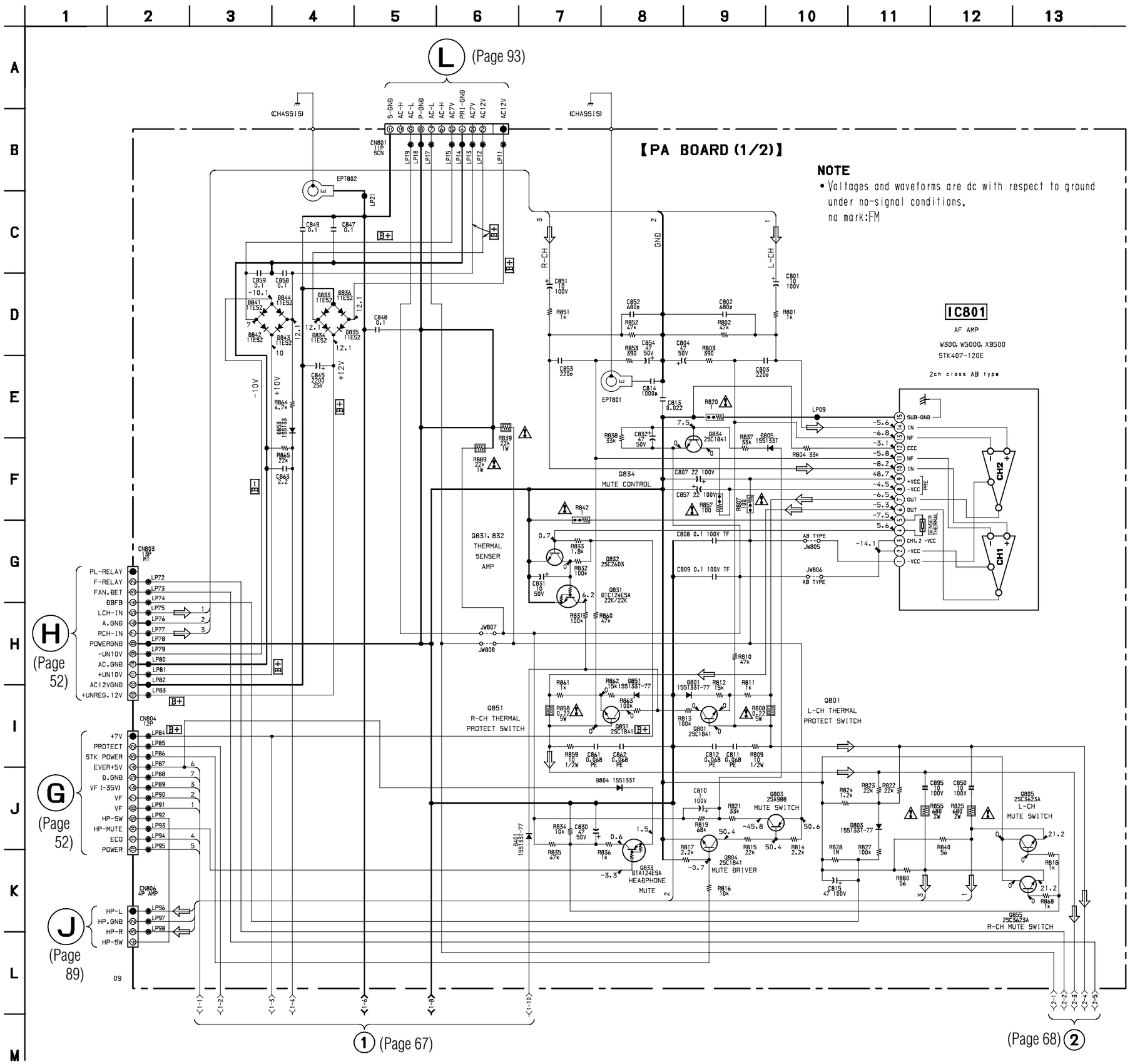


• **Semiconductor Location**

Ref. No.	Location
D401	G-4
D402	C-2
D405	A-1
D406	F-4
D801	F-4
D803	E-6
D804	G-2
D805	E-3
D833	I-5
D834	I-5
D835	I-5
D836	I-5
D841	I-3
D842	I-2
D843	I-3
D844	I-3
D851	F-4
D902	G-9
D903	G-9
D904	G-9
D905	G-9
D906	
D907	G-9
D908	H-9
D909	H-9
D910	G-9
D911	I-9
D912	I-8
D913	I-9
IC801	D-4
IC901	H-9
Q401	C-1
Q402	C-1
Q431	F-8
Q432	G-8
Q433	G-8
Q434	G-7
Q437	G-8
Q439	G-8
Q801	F-4
Q803	F-6
Q804	F-6
Q805	H-3
Q831	F-2
Q832	F-2
Q833	G-2
Q834	F-3
Q851	F-4
Q855	H-3
Q901	G-10
Q902	H-9
Q903	I-9
Q904	I-8
Q905	I-8
Q906	I-9
Q907	I-9

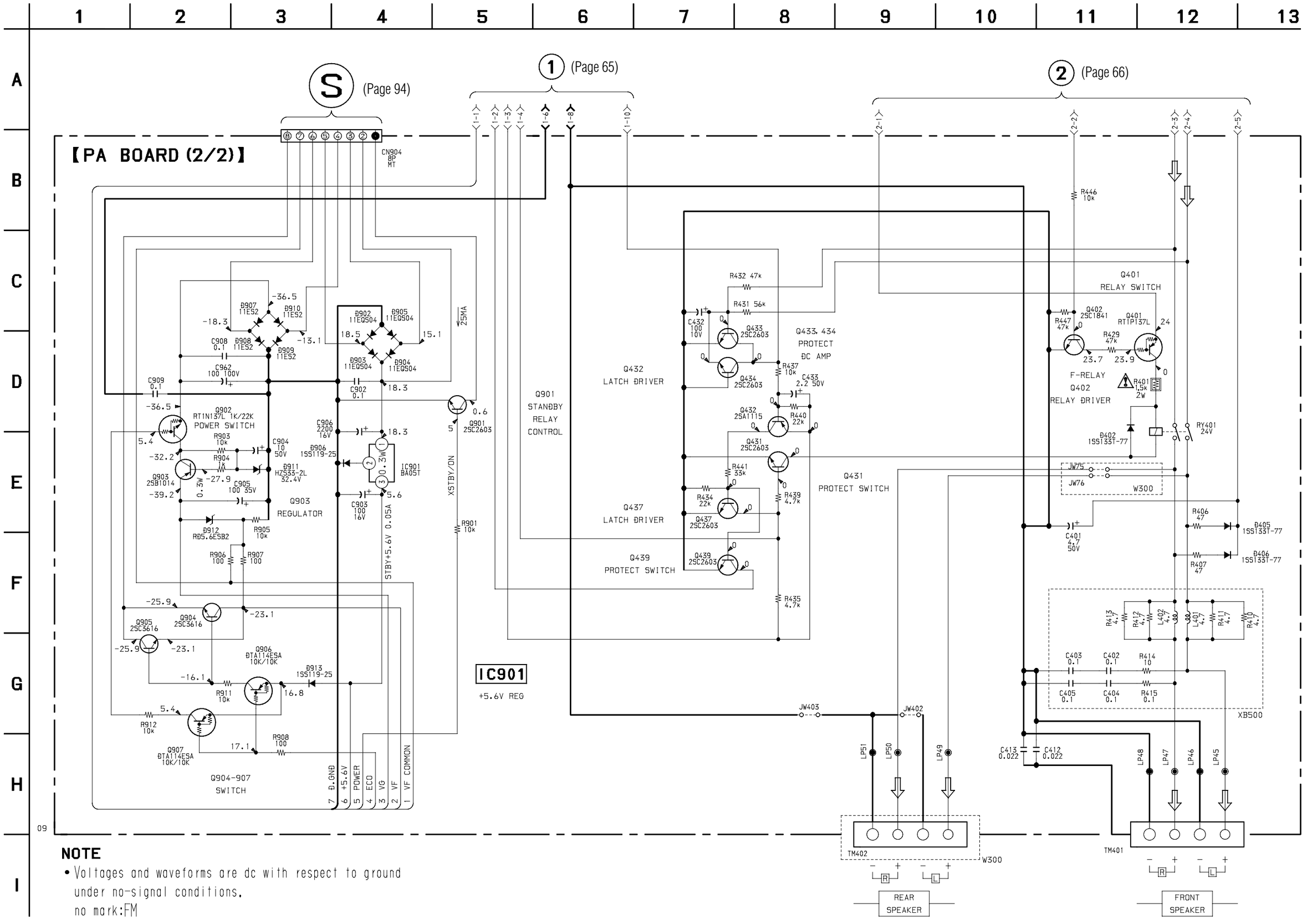
7-17. SCHEMATIC DIAGRAM – POWER (1/2) SECTION – (W300,W5000, XB500 model)

• See page 63 for Printed Wiring Board.



7-18. SCHEMATIC DIAGRAM – POWER (2/2) SECTION – (W300,W5000, XB500 model)

• See page 63 for Printed Wiring Board.



NOTE

• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark:FM

7-19. SCHEMATIC DIAGRAM – PANEL FL SECTION –

- See page 101 for IC Block Diagrams.
- See page 104 for IC Pin Functions.

【PANEL FL BOARD】

NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

FL601
FLUORESCENT INDICATOR TUBE

IC601
DISPLAY CONTROL
IC601
TMP88C576F-6000

IC602
REMUTE SENSOR
NJL64H400A

IC603
REC LEVEL OUTPUT DISPLAY CONTROL (FOR MIC)
BA3830F

IC604
SERIAL PARALLEL CONVERTER (FOR LED OUTPUT)
NJU5716L

Q608-610 DRIVER

ONLY RDS-MODEL (915CED, 935CED)

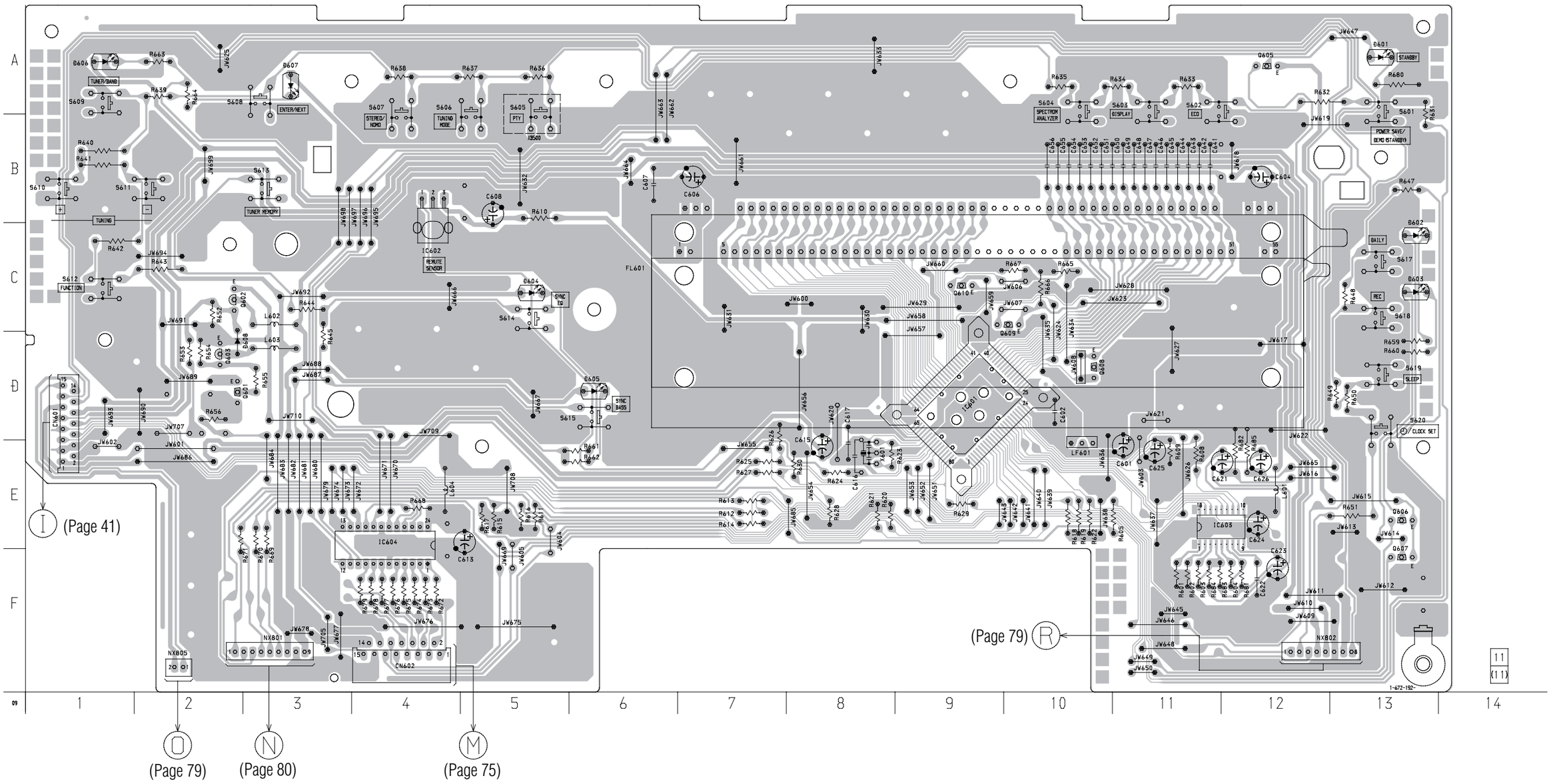
SYNC BASS | TUNER MEMORY | FUNCTION | TUNING | TUNING/BAND | ENTER/NEXT | TUNING/MODE | STEREO/MONO | PTY | SPECTRUM ANALYZER | DISPLAY | ECO | POWER SAVE/DEMO (STANDBY) | SYNC EQ | CLOCK SET | SLEEP | REC | DAILY

R (Page 78) | N (Page 77) | O (Page 77) | I (Page 46) | M (Page 73)

7-20. PRINTED WIRING BOARD – PANEL FL SECTION –

• See page 20 for Circuit Boards Location.

【PANEL FL BOARD】

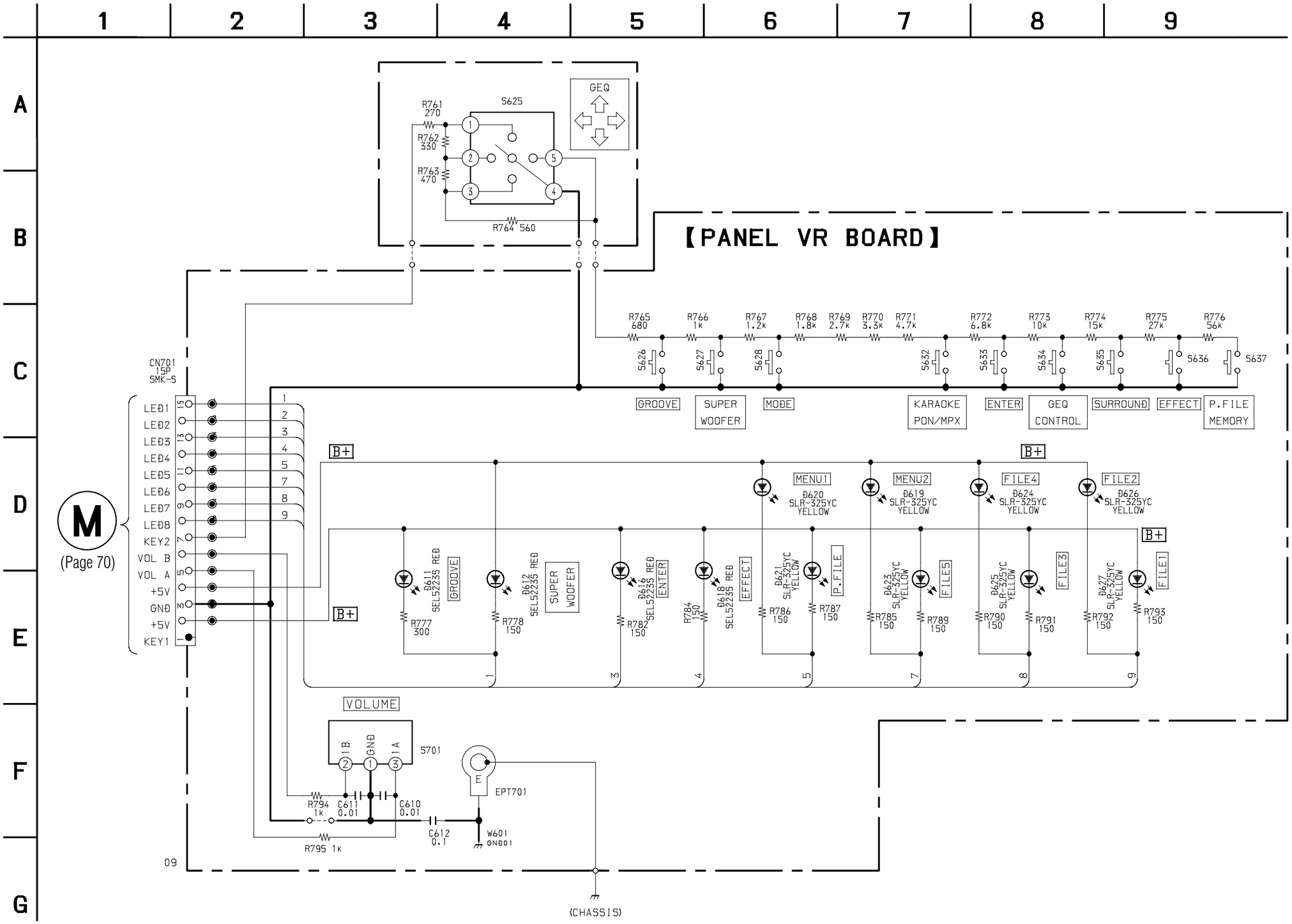


• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D601	A-13	IC604	E-4
D602	C-13		
D603	C-13	Q601	D-2
D604	C-5	Q602	C-2
D605	D-6	Q603	D-2
D606	A-1	Q605	A-12
D607	A-3	Q606	E-13
D608	D-2	Q607	F-13
		Q608	D-10
IC601	D-9	Q609	C-10
IC602	C-4	Q610	C-9
IC603	E-12		

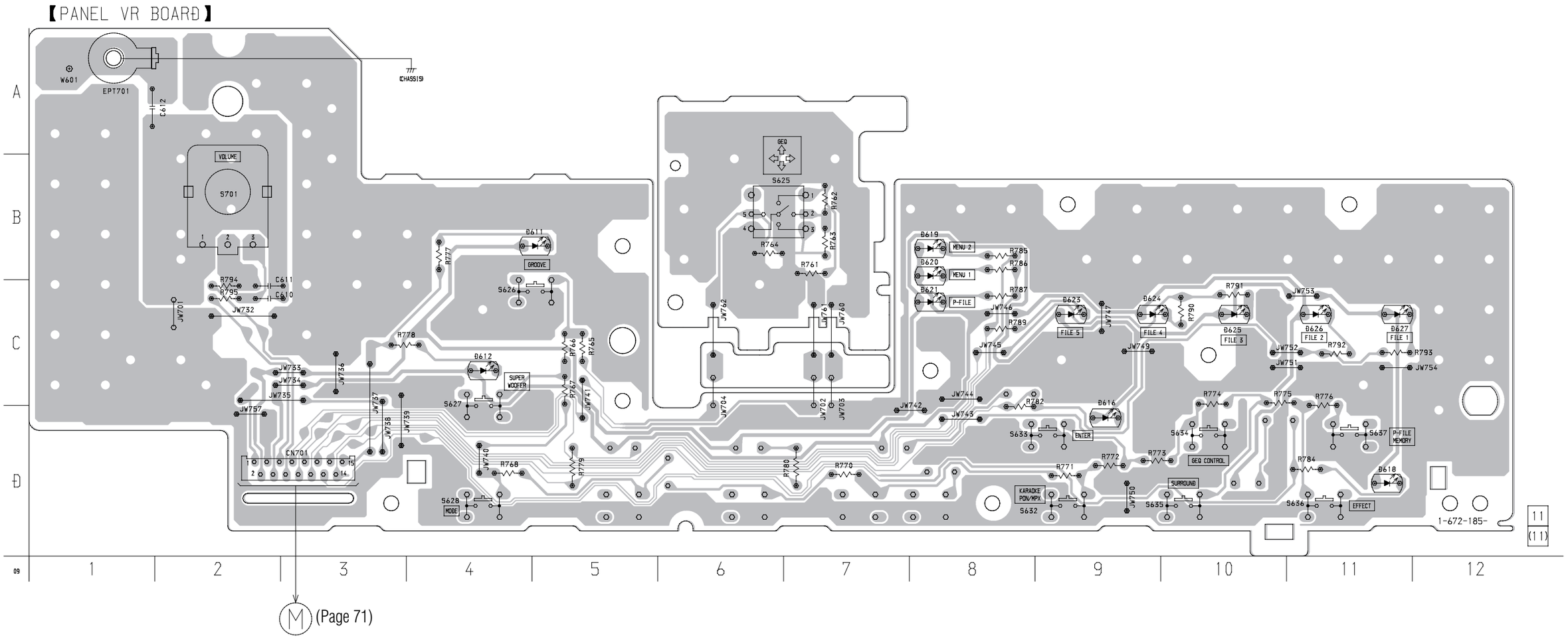
7-21. SCHEMATIC DIAGRAM – PANEL VR SECTION –

• See page 101 for IC Block Diagrams.



7-22. PRINTED WIRING BOARD – PANEL VR SECTION –

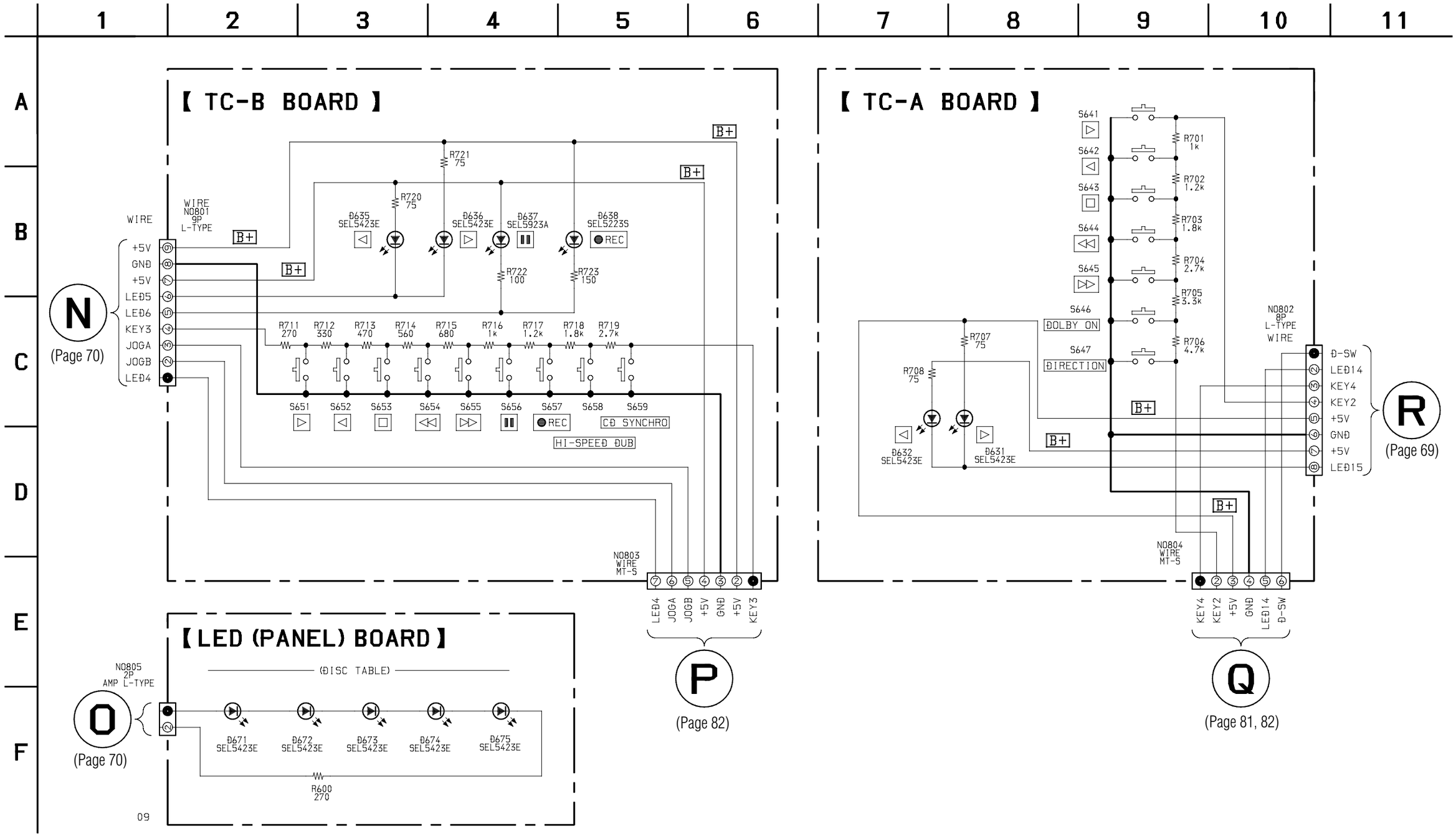
• See page 20 for Circuit Boards Location.



• Semiconductor Location

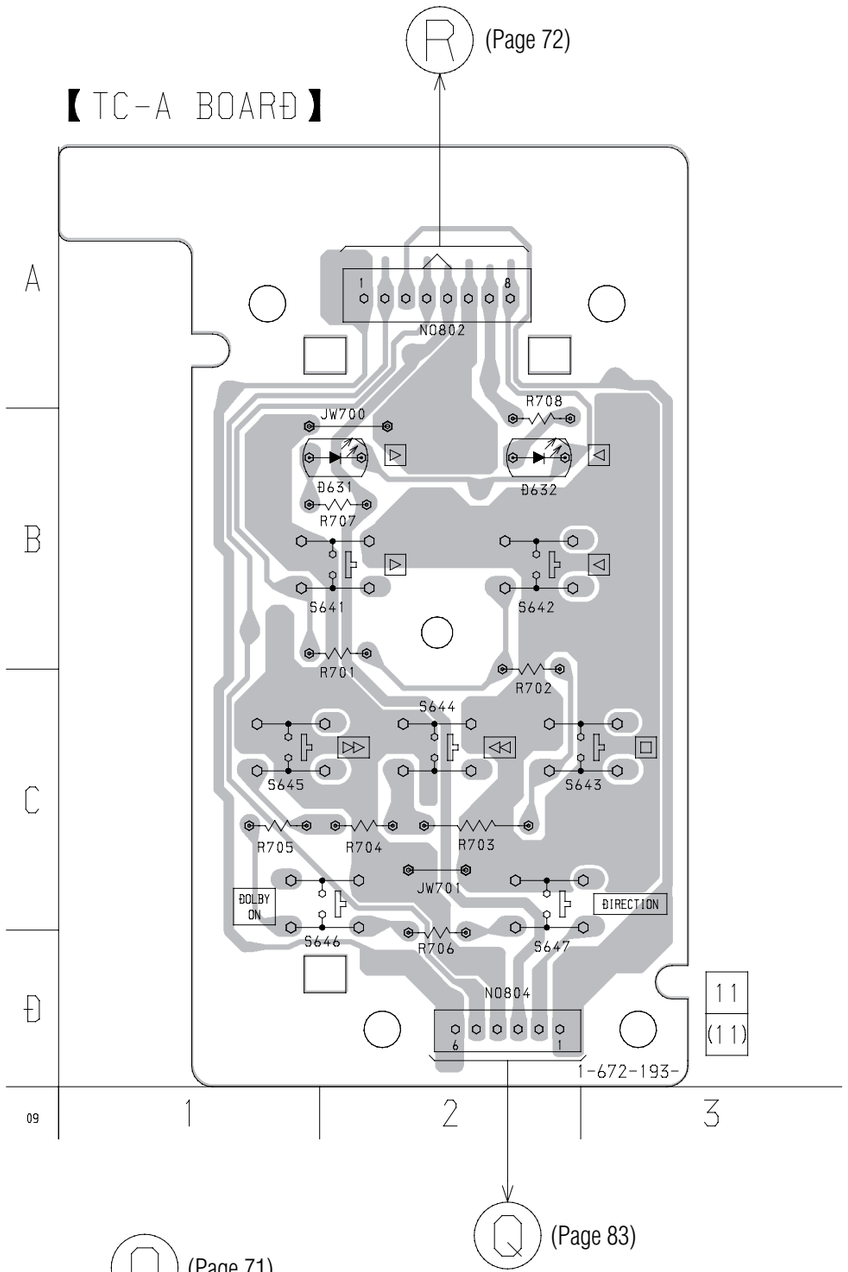
Ref. No.	Location
D611	B-5
D612	C-4
D616	D-9
D618	D-11
D619	B-8
D620	B-8
D621	C-8
D623	C-9
D624	C-9
D625	C-10
D626	C-11
D627	C-11

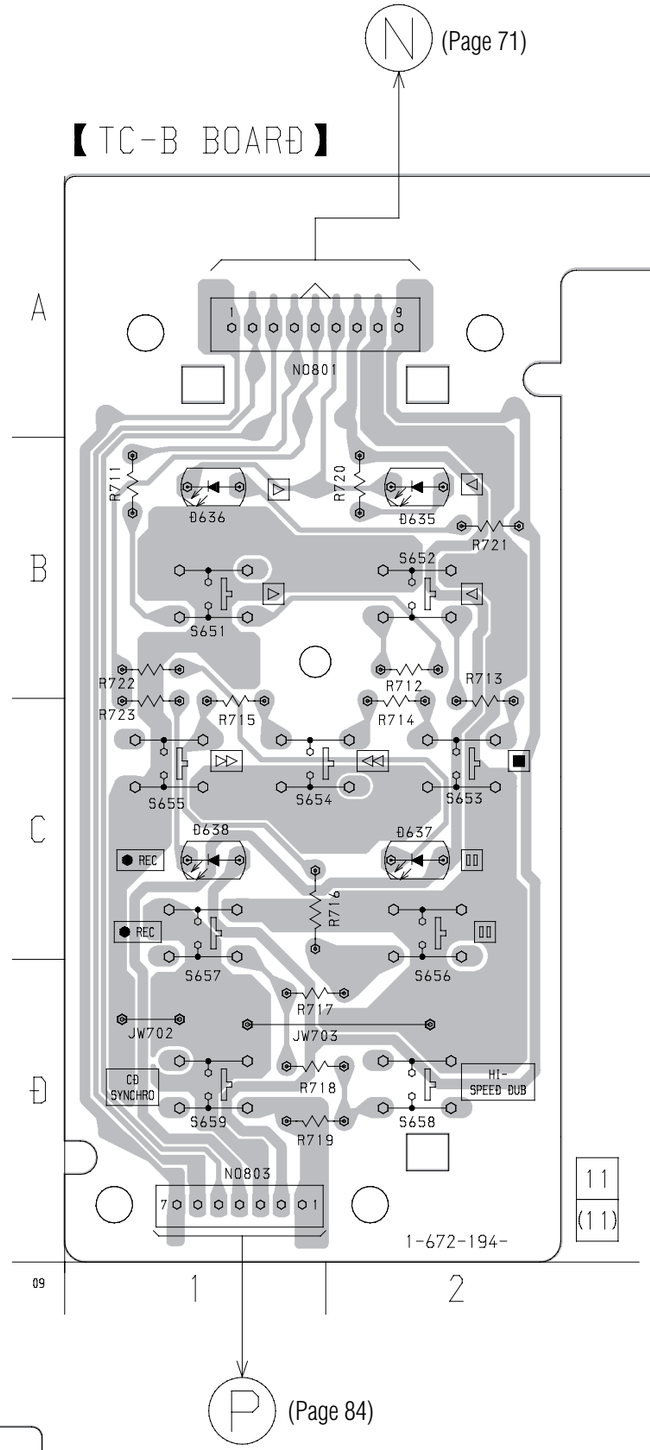
7-23. SCHEMATIC DIAGRAM – TC PANEL SECTION –

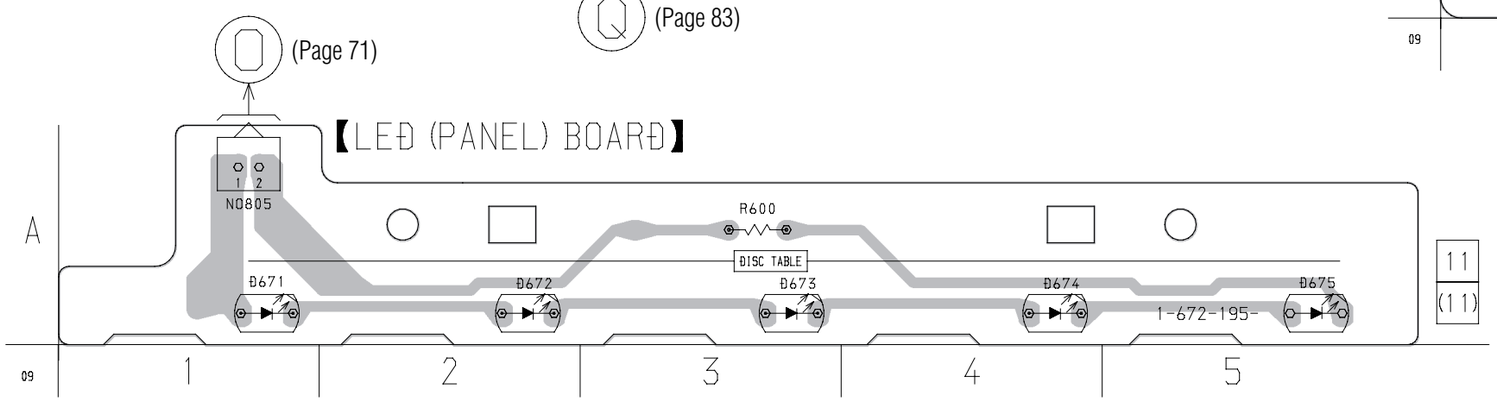


7-24. PRINTED WIRING BOARD – TC PANEL SECTION –

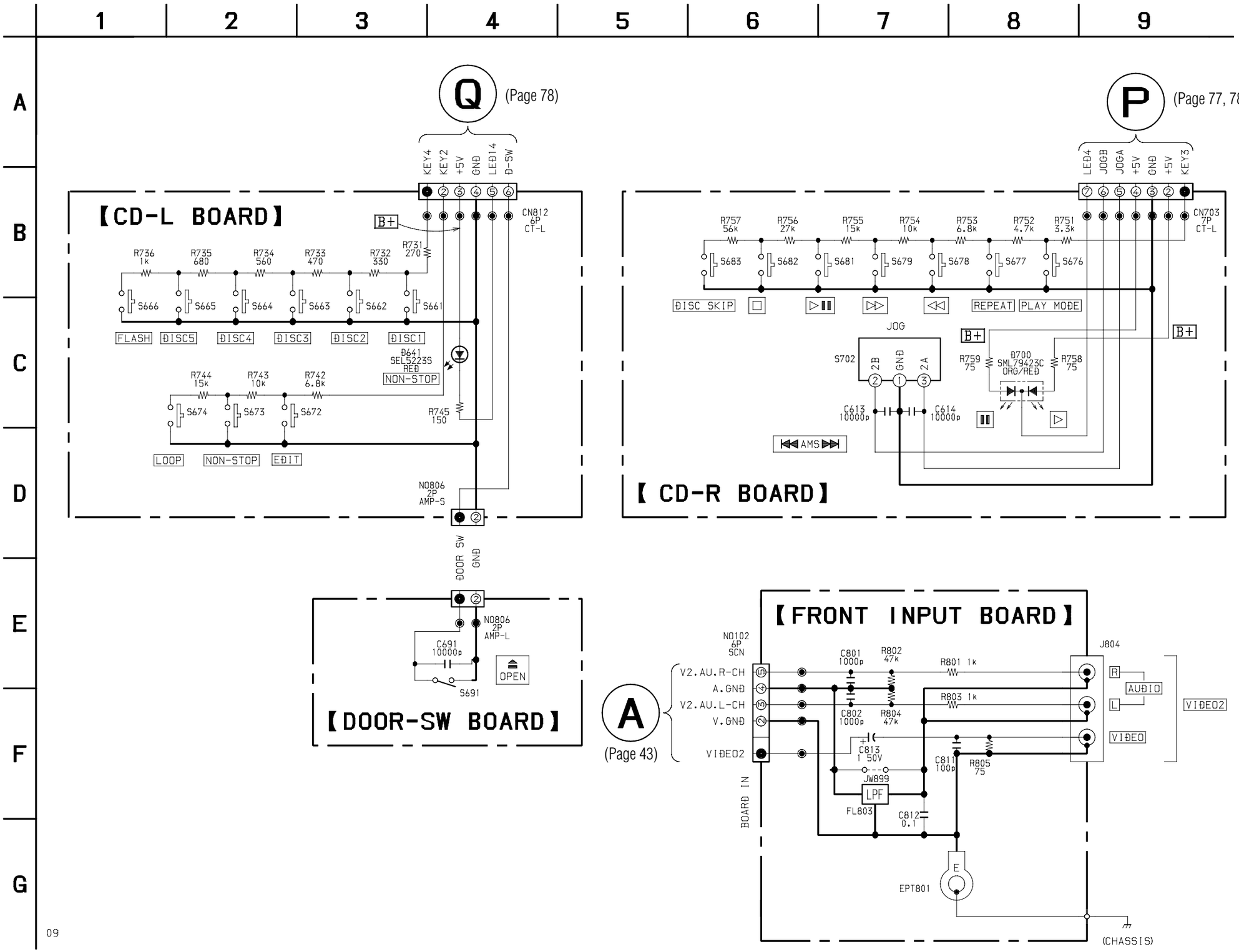
• See page 20 for Circuit Boards Location.







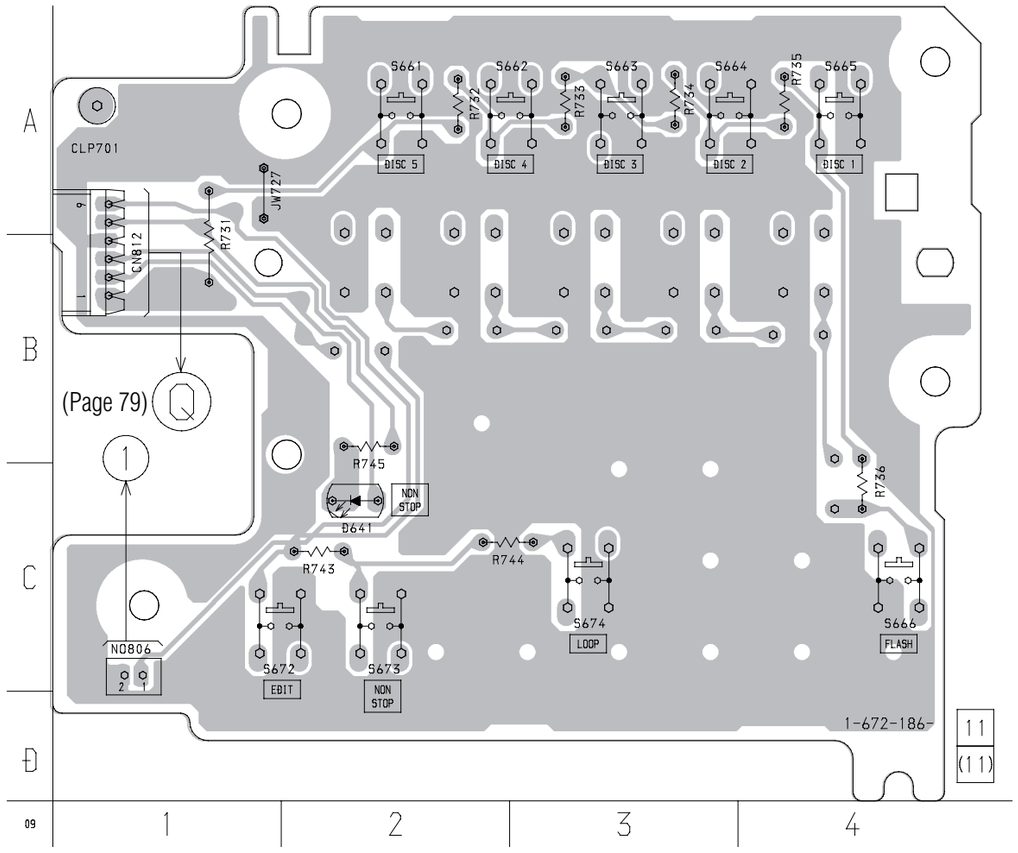
7-25. SCHEMATIC DIAGRAM – CD PANEL SECTION –



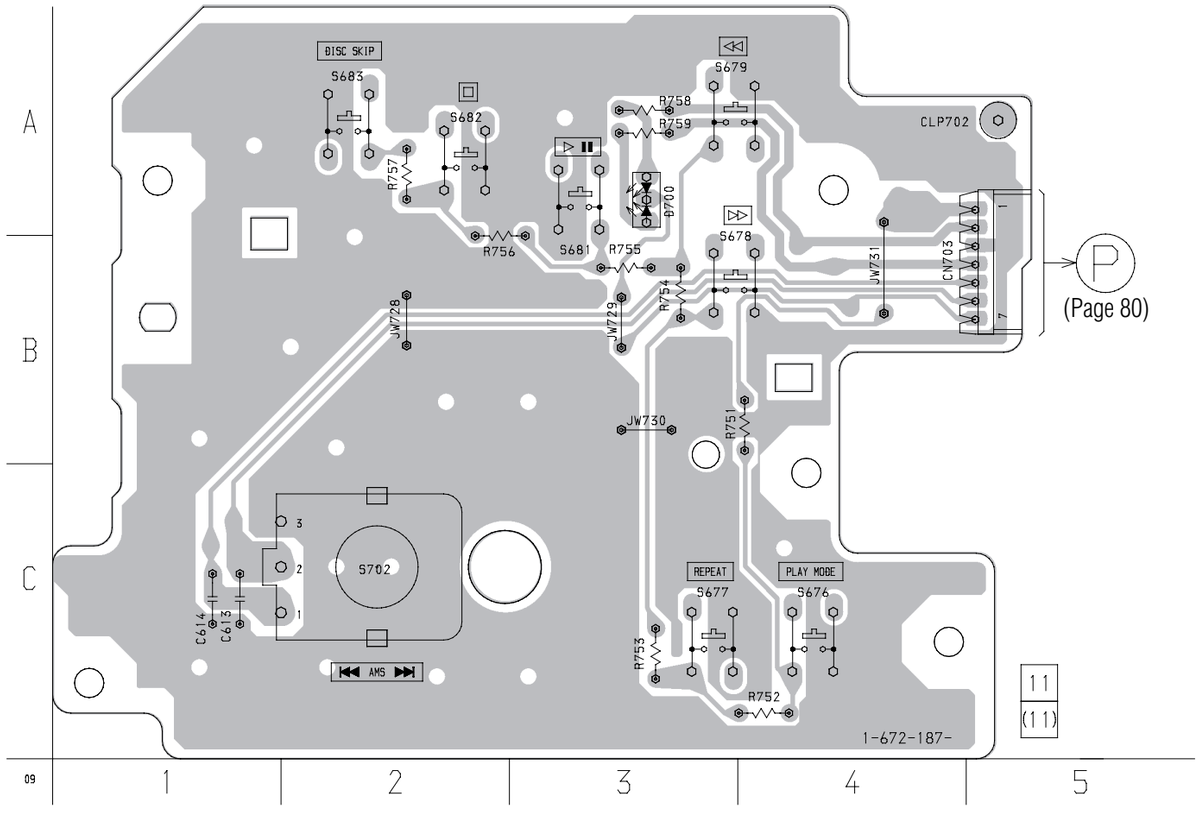
7-26. PRINTED WIRING BOARD – CD PANEL SECTION –

• See page 20 for Circuit Boards Location.

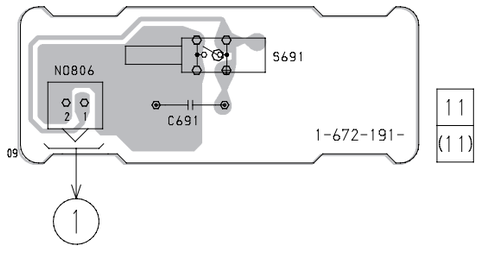
【CD-L BOARD】



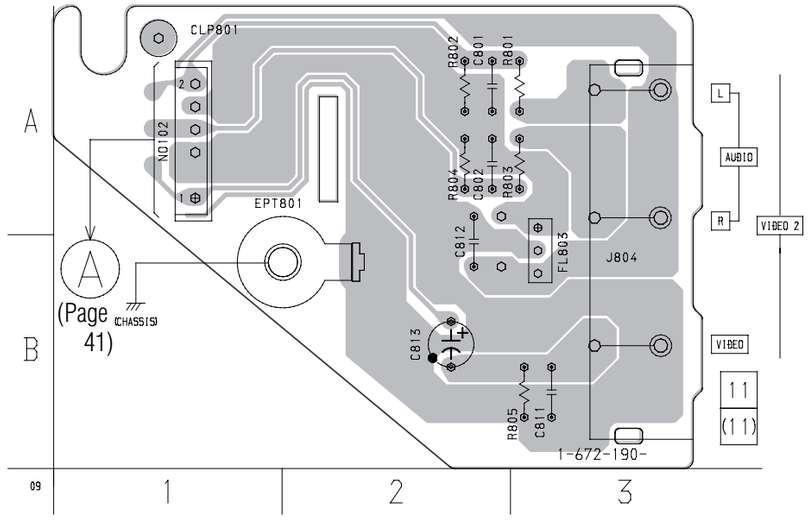
【CD-R BOARD】



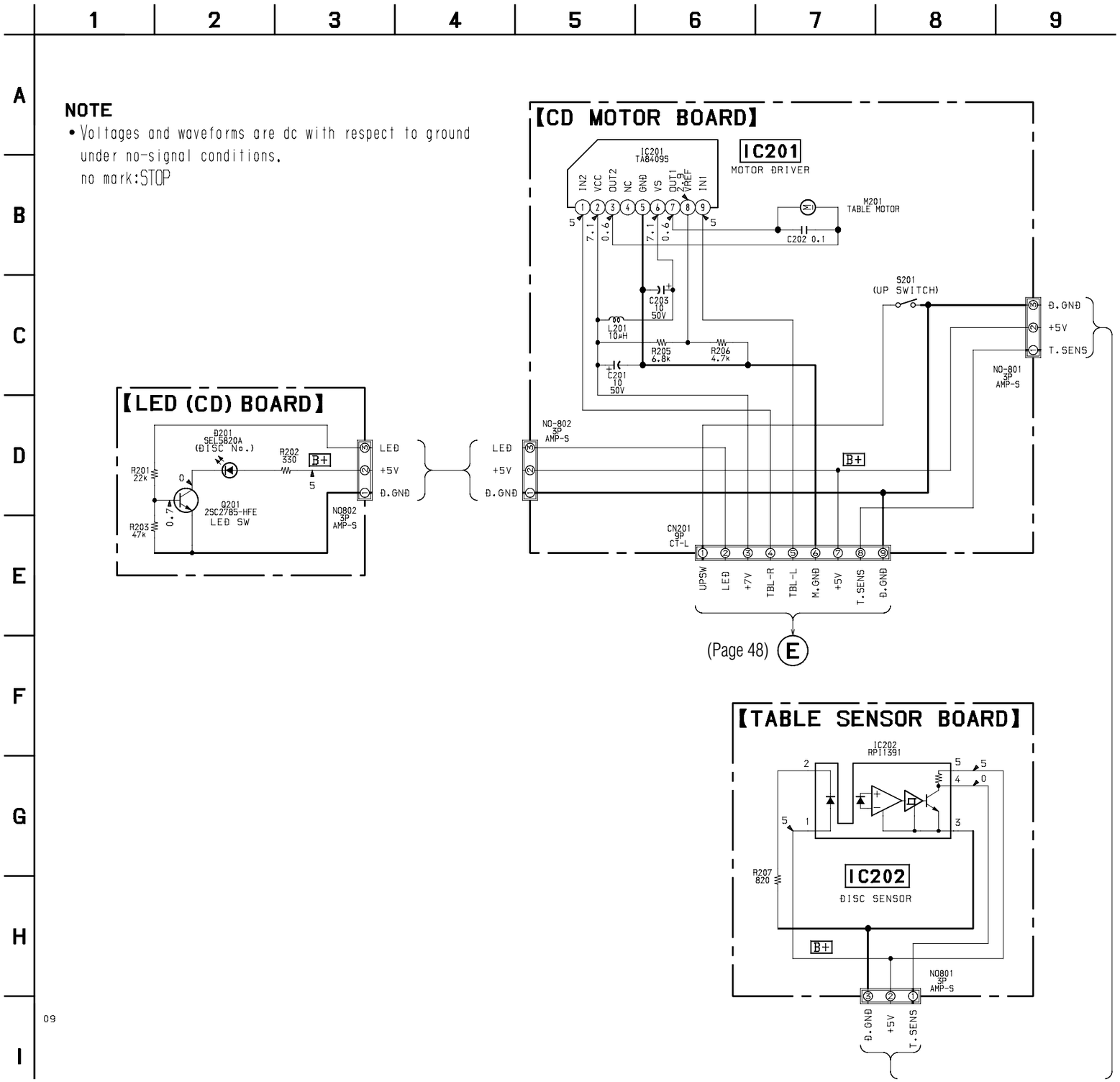
【DOOR-SW BOARD】



【FRONT INPUT BOARD】

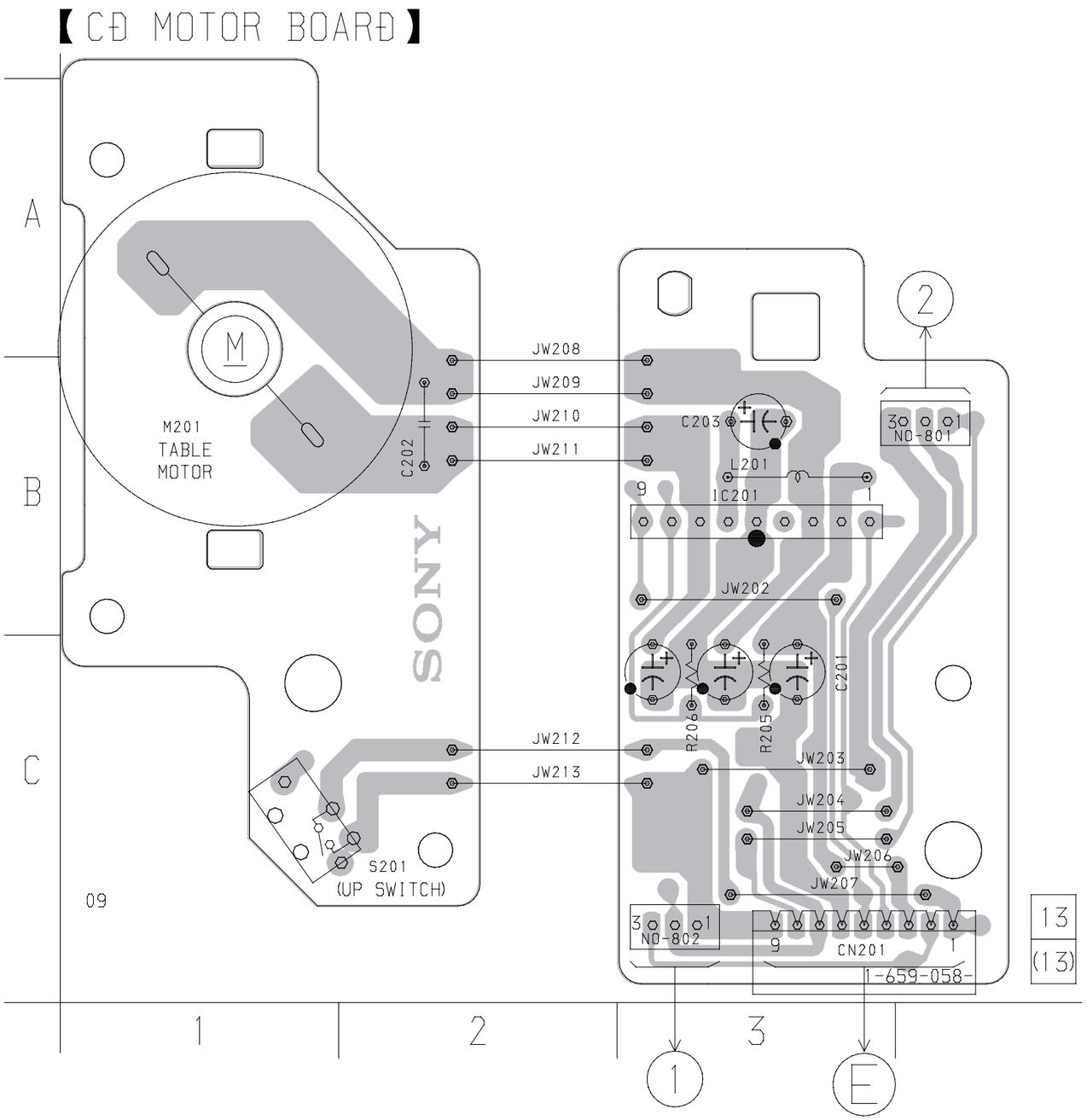


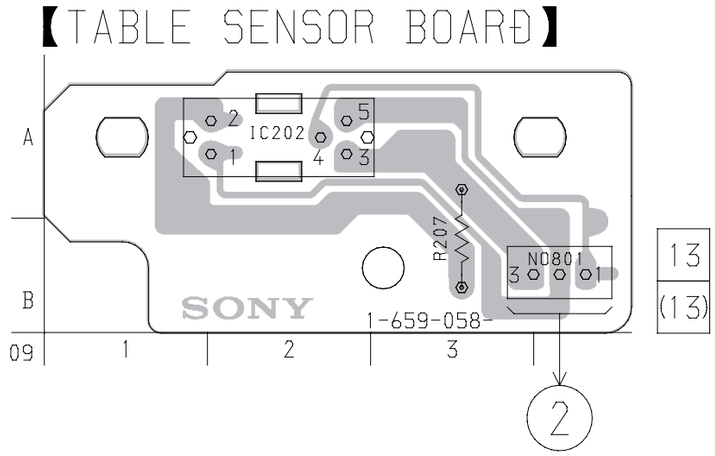
7-27. SCHEMATIC DIAGRAM – CD MOTOR SECTION –

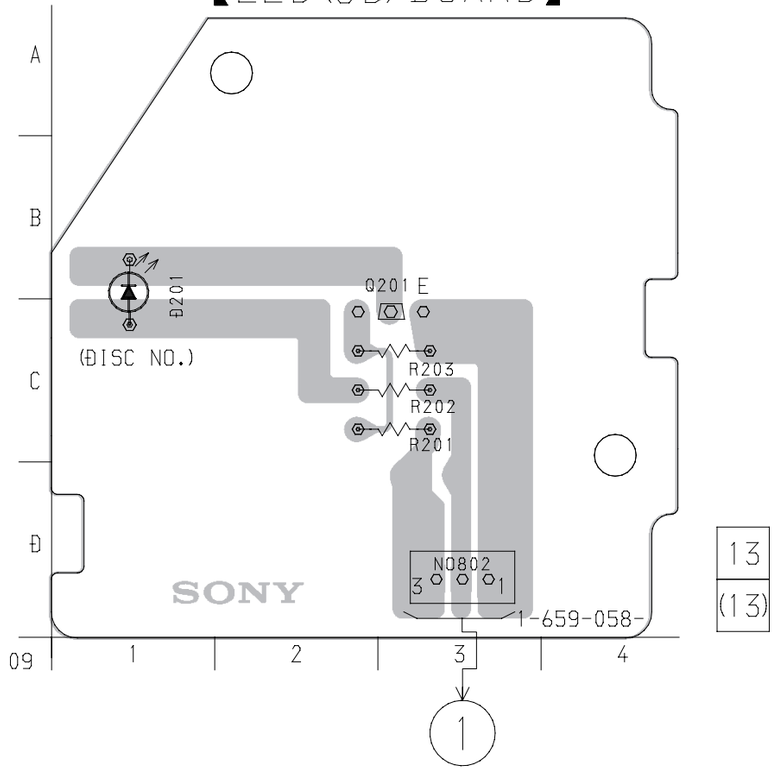


7-28. PRINTED WIRING BOARD – CD MOTOR SECTION –

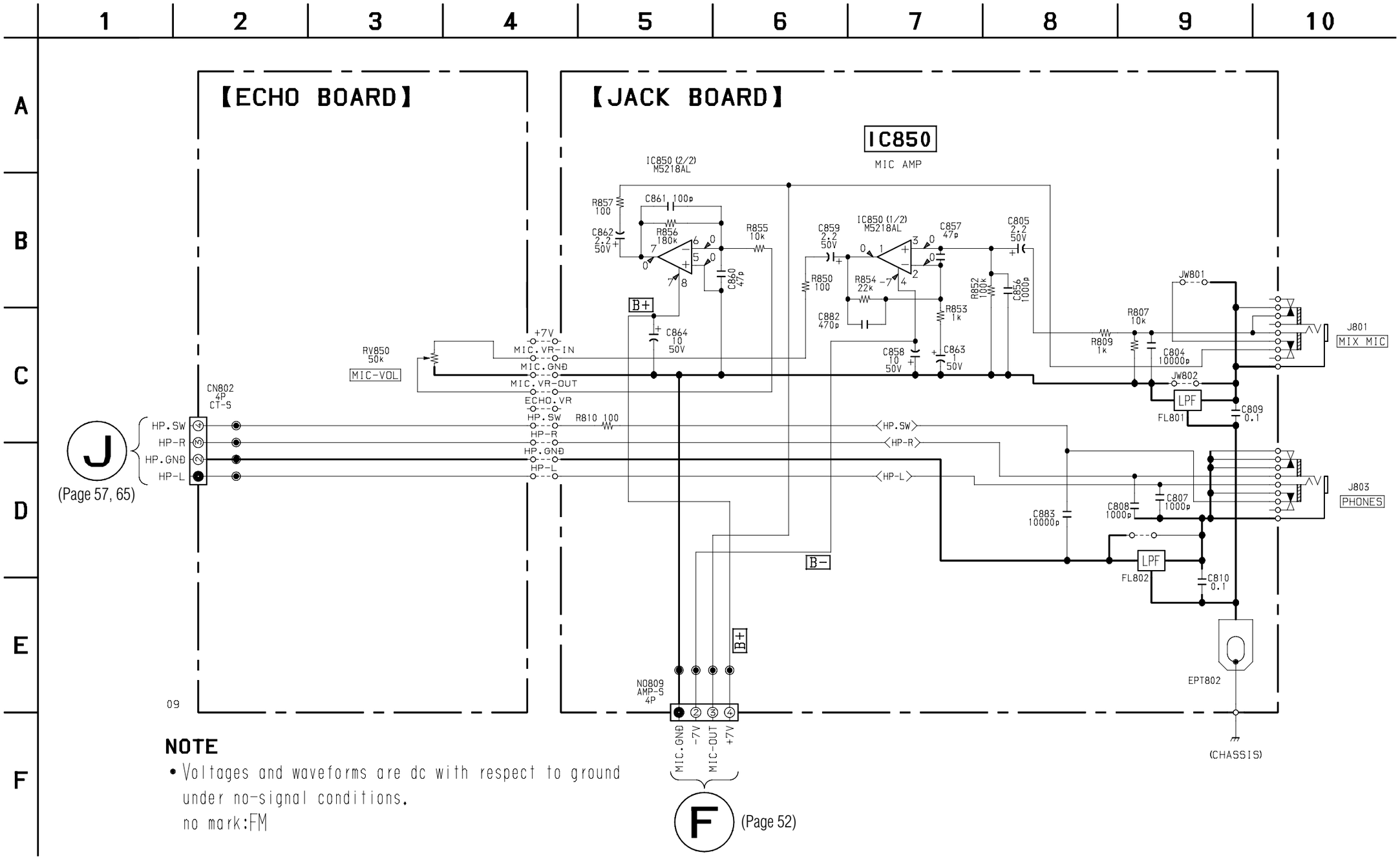
• See page 20 for Circuit Boards Location.







7-29. SCHEMATIC DIAGRAM – JACK SECTION –

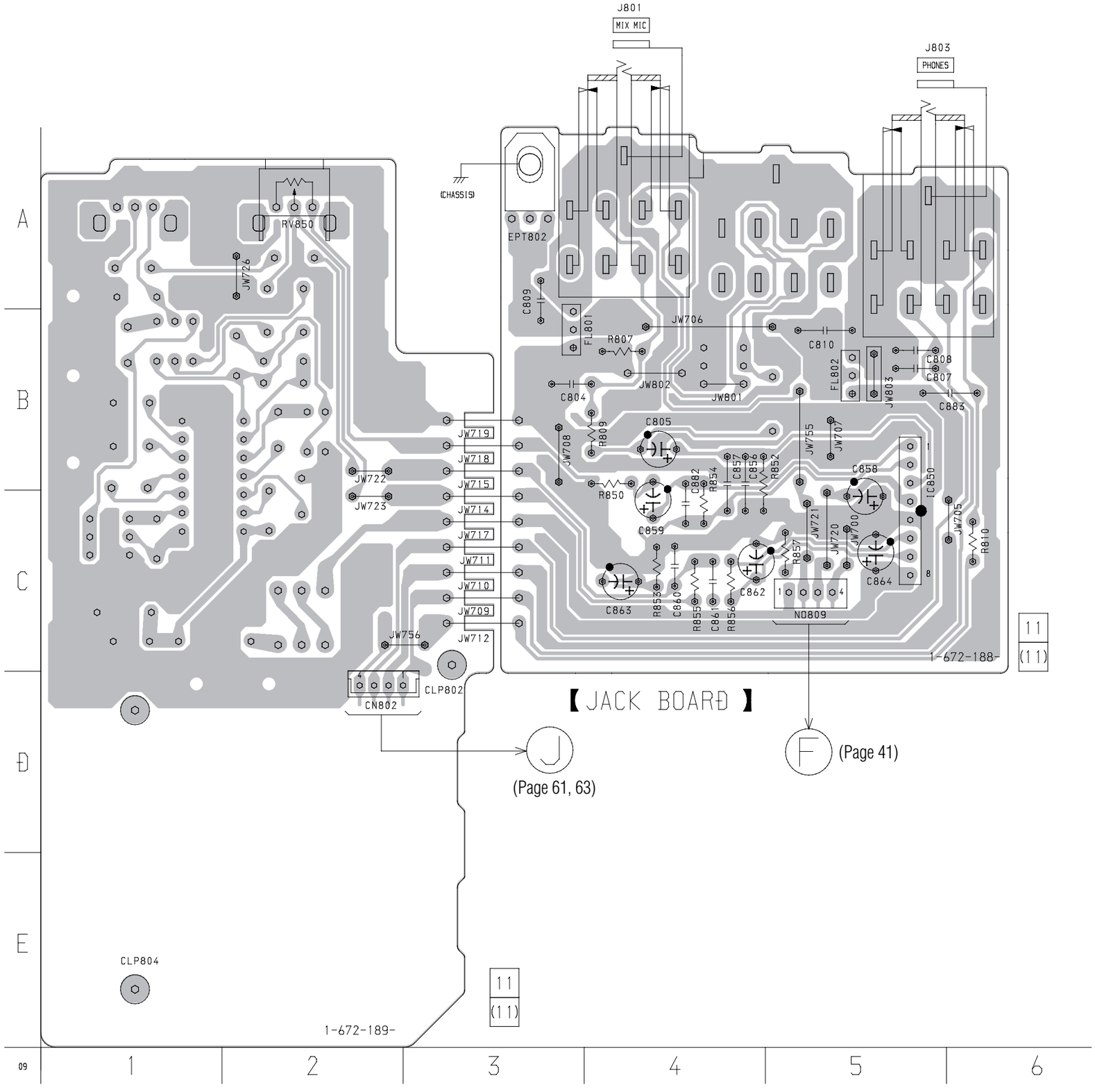


NOTE

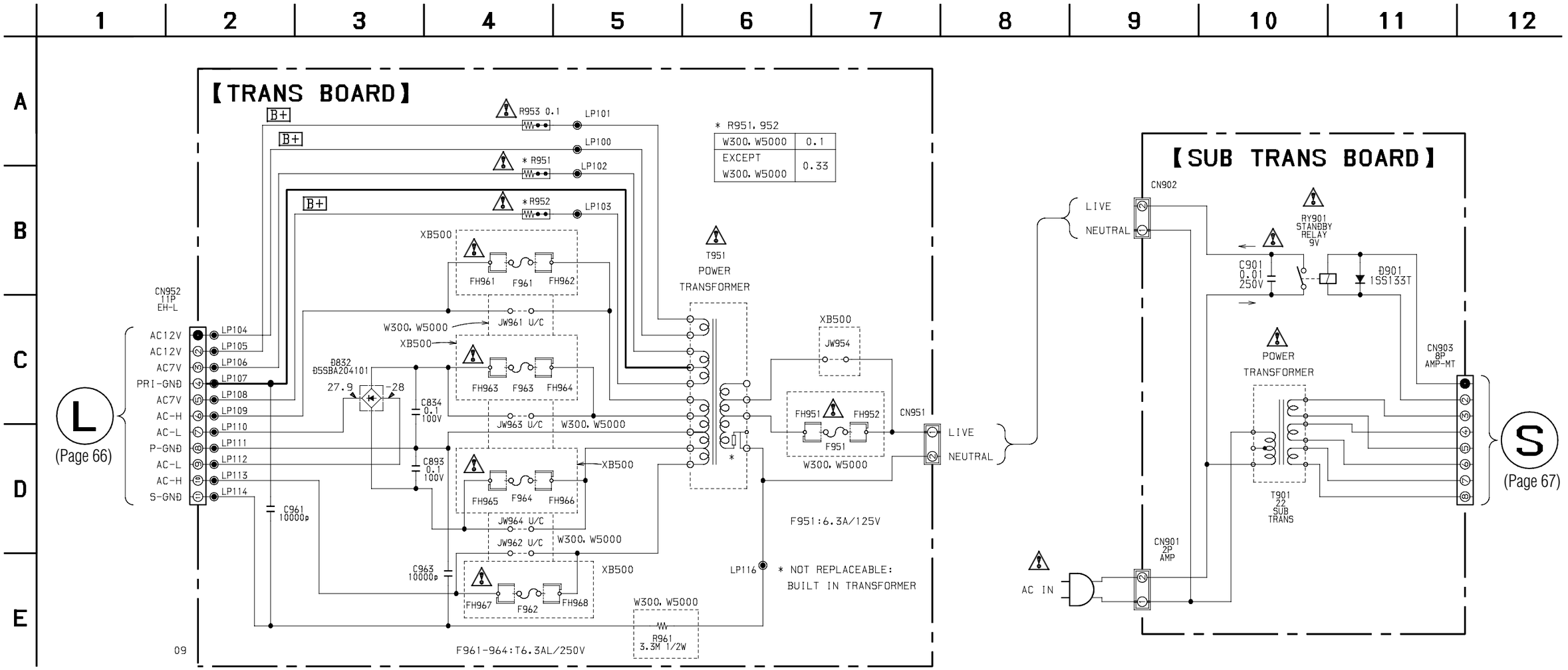
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

7-30. PRINTED WIRING BOARD – JACK SECTION –

• See page 20 for Circuit Boards Location.



7-31. SCHEMATIC DIAGRAM – TRANS SECTION – (W300, W5000, XB500 model)

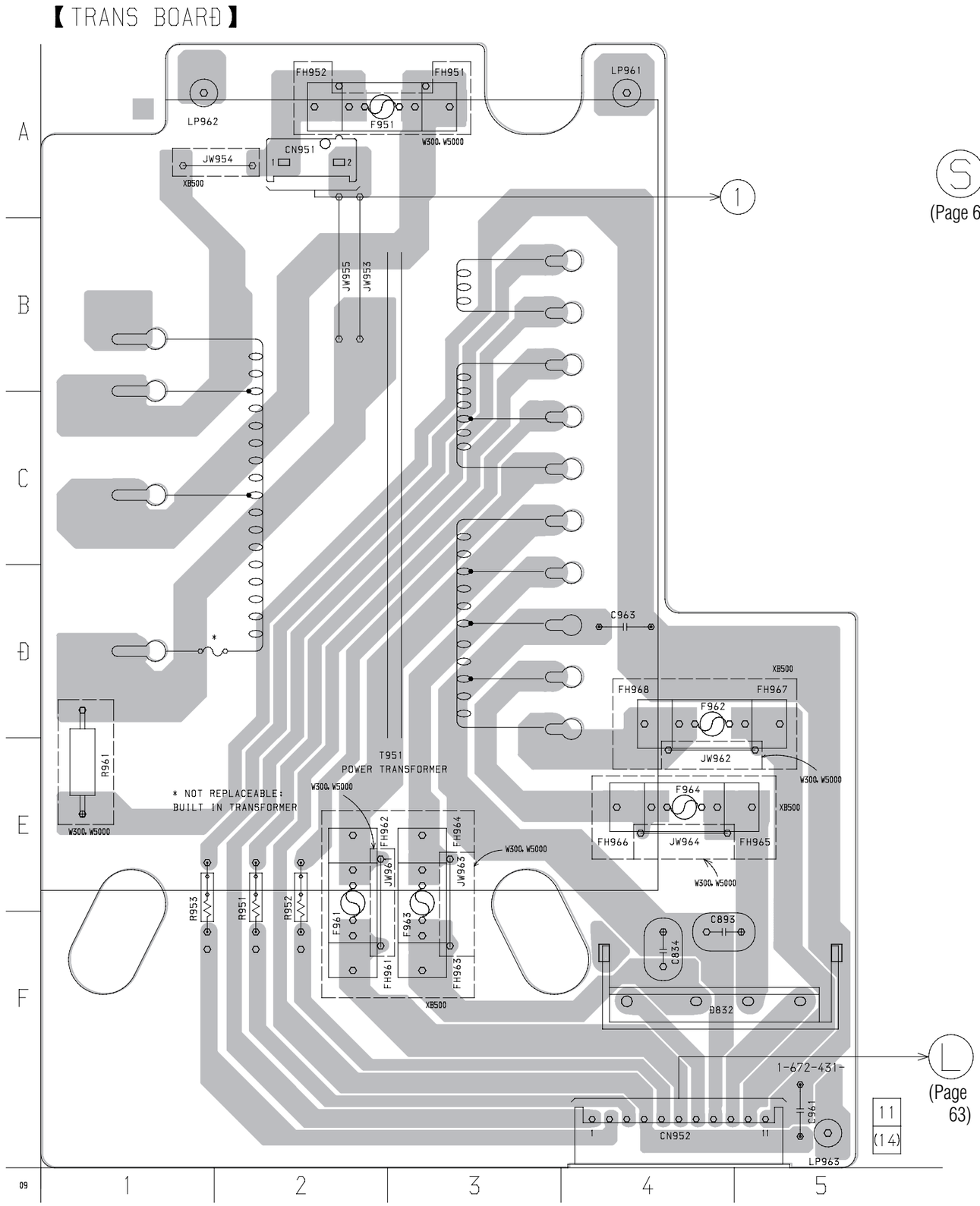


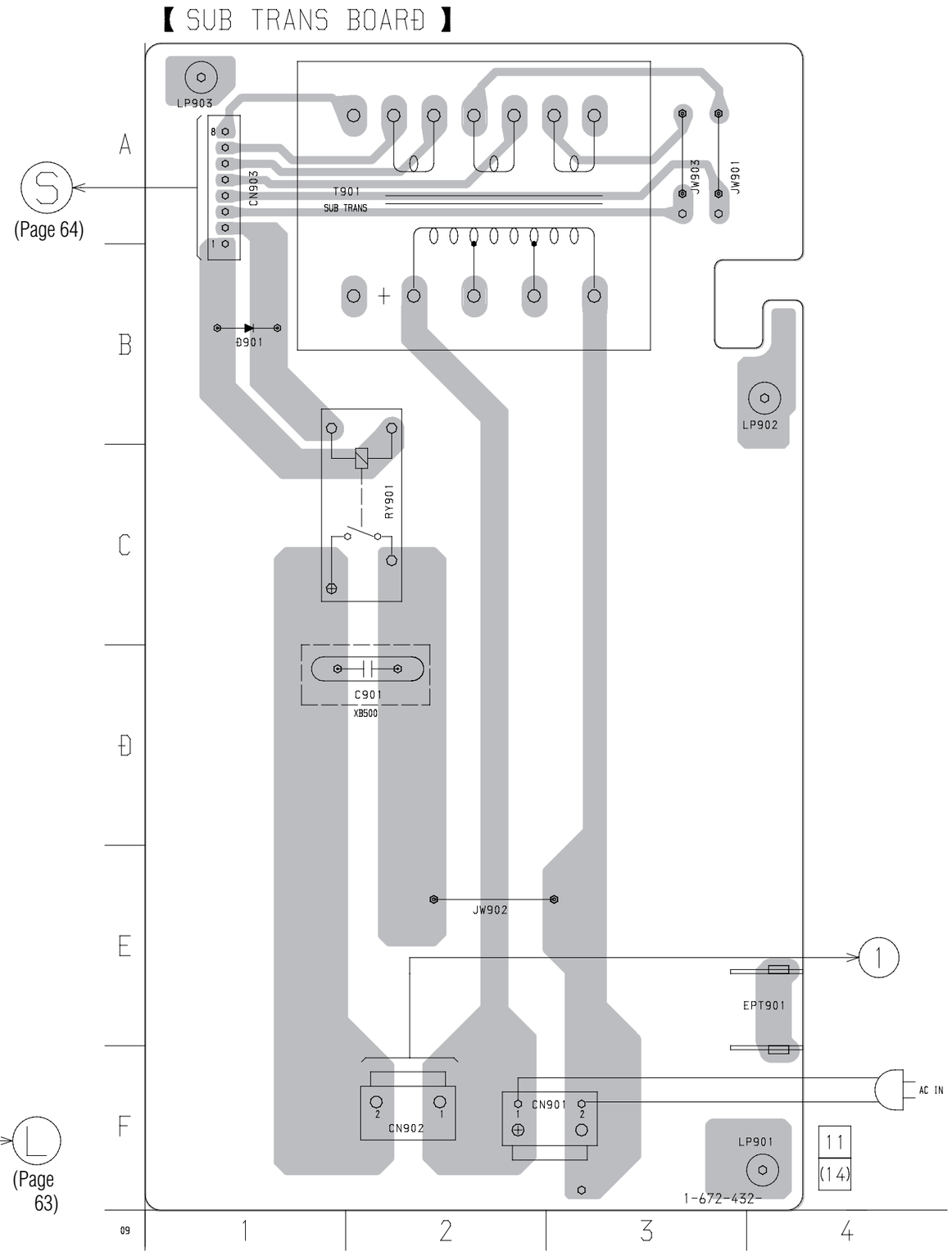
NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

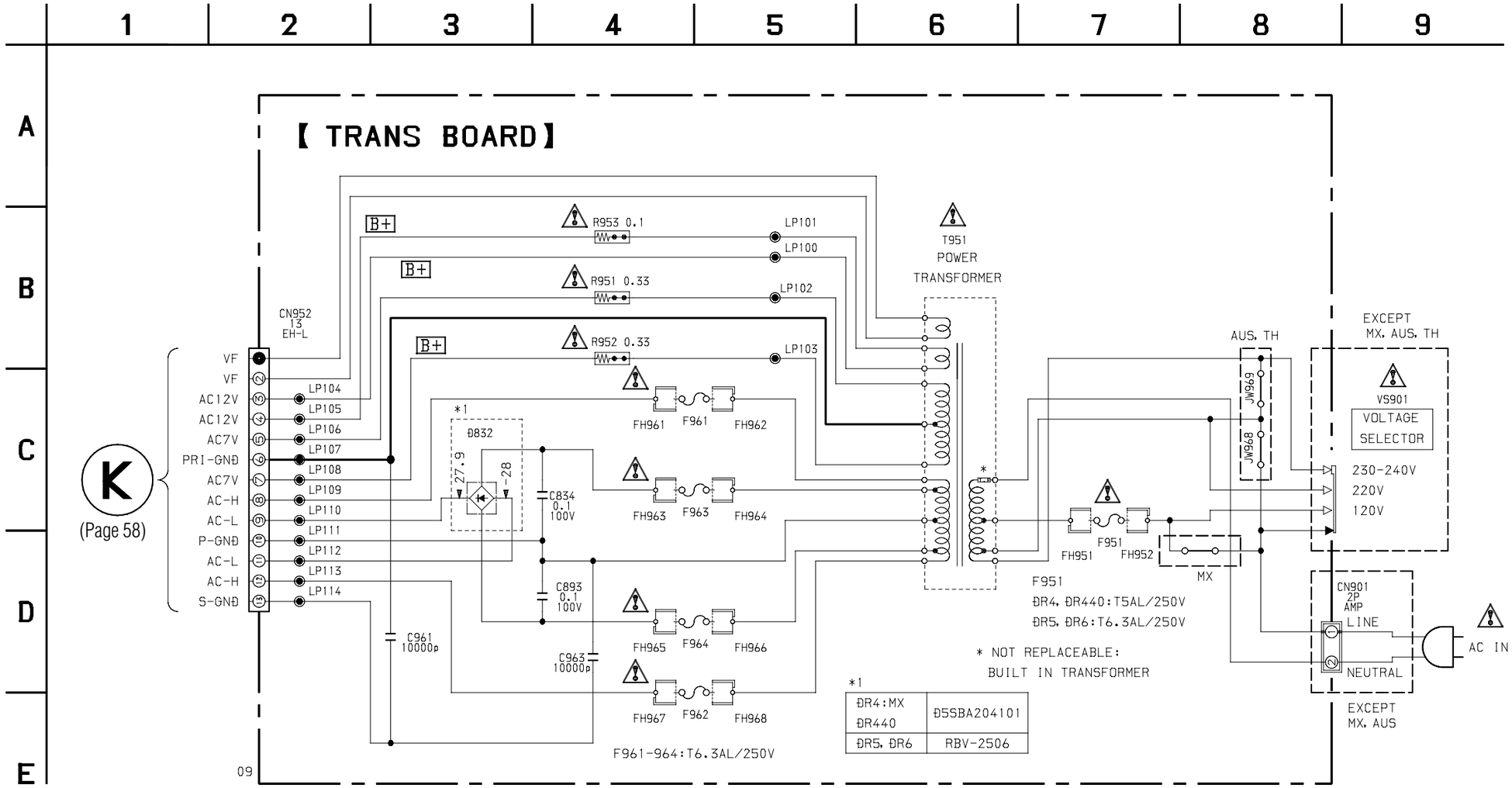
7-32. PRINTED WIRING BOARD – TRANS SECTION – (W300, W5000, XB500 model)

• See page 20 for Circuit Boards Location.





7-33. SCHEMATIC DIAGRAM – TRANS SECTION – (DR4, DR5, DR6, DR440 model)

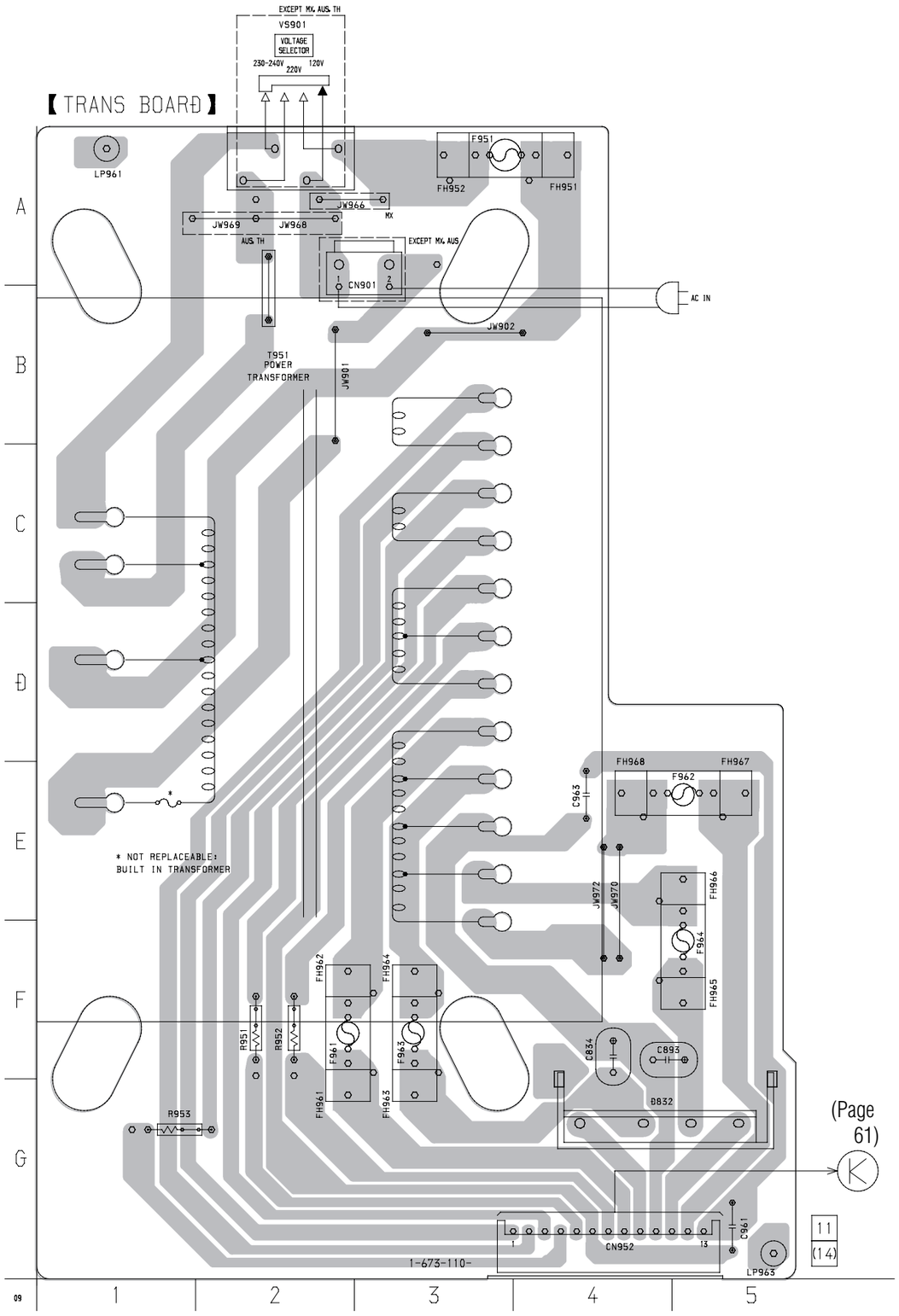


NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

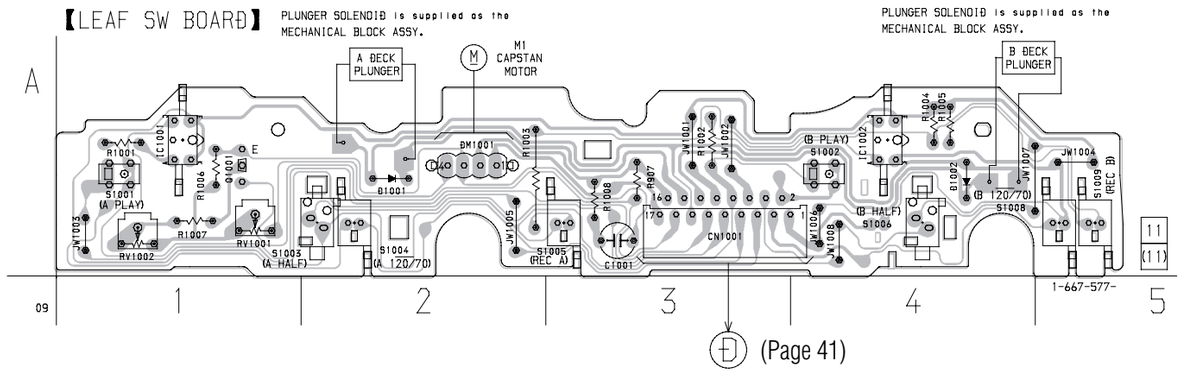
7-34. PRINTED WIRING BOARD – TRANS SECTION – (DR4, DR5, DR6, DR440 model)

• See page 20 for Circuit Boards Location.



7-35. SCHEMATIC DIAGRAM – LEAF SW SECTION –

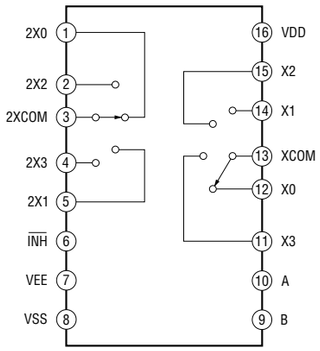
7-36. PRINTED WIRING BOARD – LEAF SW SECTION –



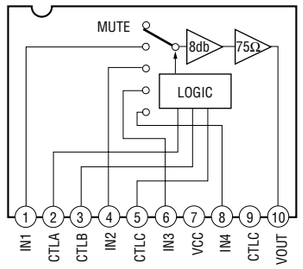
7-37. IC BLOCK DIAGRAMS

• MAIN (1/2) section

IC181 MC14052BF

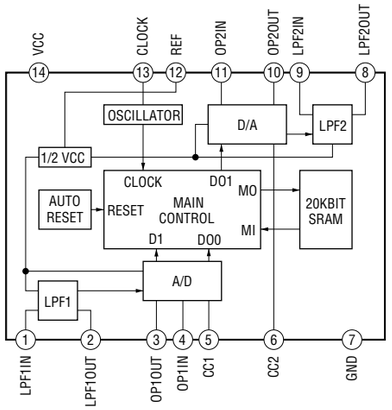


IC191 BA7615N



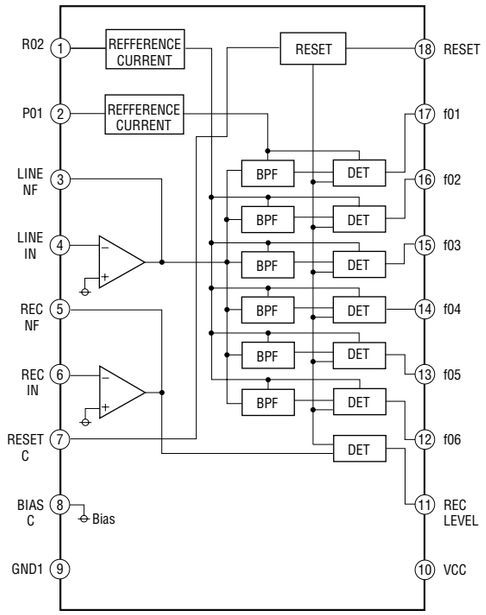
• PANEL VR section

IC851 M65850P

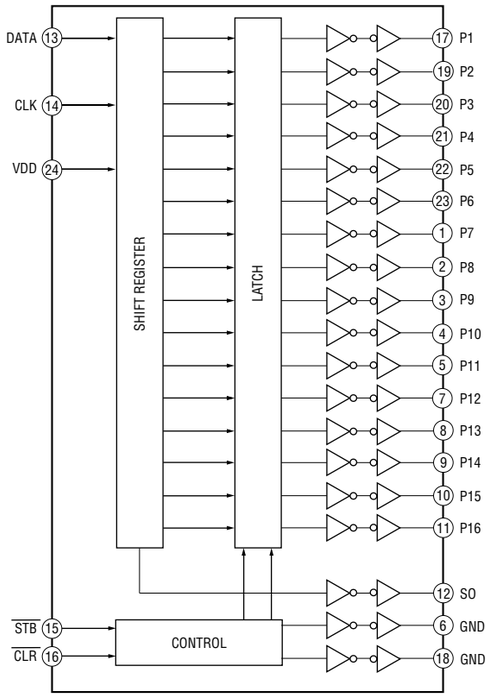


• PANEL FL section

IC603 BA3830F



IC604 NJU3716L



7-38. IC PIN FUNCTIONS

• IC501 MAIN CONTROL (M306622 MA-A01FP)

Pin No.	Pin Name	I/O	Function
1	POWER	O	Power amp ON/OFF signal output
2	POWER	O	Power ON/OFF signal output
3	F-RELAY	O	Front speaker relay control output
4	REAR-RELAY	O	Rear speaker relay control output (Not used)
5	CD-POWER	O	CD power on signal output
6	LINE-MUTE	O	Line mute signal output
7	DBFB-H/L	O	DBFB H/L select signal output
8	–	–	Connected to ground
9	–	–	Connected to ground
10	XC-IN	I	X’tal (32.768 KHz) (SUB CLOCK)
11	XC-OUT	O	
12	RESET	I	System reset signal input
13	X-OUT	O	X’tal (16MHz) (MAIN SYSTEM CLOCK)
14	VSS	–	Ground
15	X-IN	I	X’tal (16MHz) (MAIN SYSTEM CLOCK)
16	VDD	–	Power supply (+5V)
17	NMI	I	Not used
18	WAKE UP	I	WAKE UP signal input
19	SCOR	I	CD Q-data request signal input
20	RDS-INT	I	RDS data interrupt input
21	RDS-DATA	I	RDS data interrupt input
22	AC-CUT	I	AC cut ON (L)/OFF (H) check
23	PL-CLK	O	Clock output to pro-logic (Not used)
24	PL-DATA	O	Data output to pro-logic (Not used)
25	PL-LAT	O	Latch signal output to pro-logic (Not used)
26	TIMER LED	O	Not used
27	PROTECT	I	Speaker protect signal input
28	V MUTE	O	Video mute signal output
29	IIC-CLK	O	I^2C SCL
30	IIC-DATA	O	I^2C SDA
31	–	–	Not used
32	SQ-DATA	I	Subcode Q data clock input (CD data)
33	SQ-CLK	I	Subcode Q data clock input (CD data clock)
34	SW-MODE	O	SW-MODE music/movie select signal output
35	CD-DATA	O	CD data output
36	H/P IN	I	Head phone detect
37	CD-CLK	O	CD clock output
38	493-LAT	O	Latch signal output for IC101 (M62493FP)
39	CLOCK-OUT	O	Clock out signal check
40	NO-USE	–	Not used
41	NO-USE	–	Not used
42	FL OFF	O	Fluorescent indicator tube filament on/off signal output
43	STBY RELAY	O	Main POWER on/off signal output
44	BASS FREQ	O	FREQ high/low signal output (Not used)
45	FUNC SEL 1	O	Function select signal output
46	FUNC SEL 0	O	Function select signal output
47	493-DATA	O	Data signal output for IC101 (M62493FP)
48	493-CLK	O	Clock signal output for IC101 (M62493FP)
49	ST-MUTE	O	Tuner mute signal output

Pin No.	Pin Name	I/O	Function
50	STEREO	I	Stereo detection for tuner
51	TUNED	I	Tuned detection for tuner
52	ST-CE	O	Tuner chip enable output
53	ST-DOUT	O	Tuner data output
54	ST-DIN	I	Tuner data input
55	ST-CLK	O	Tuner clock output
56	SENS	I	BD Condition signal input
57	HOLD	O	MODE signal output
58	XLT	O	CD latch signal output
59	XRST	O	CD reset signal output
60	DISC-SENS	I	Slit sensor of disc table input (Connected to ground)
61	T-SENS	I	CD table detection signal input
62	VDD	–	Power supply (+5V)
63	TBL-L	O	Table motor control output
64	VSS	I	Ground
65	TBL-R	O	Table motor control output
66	LOAD-OUT	O	Loading motor control signal output (Not used)
67	LOAD-IN	O	
68	ENC 3/UP-SW	I	Disc tray address detect encoder input
69	ENC 2/DISC-LED	I	
70	ENC 1	I	(Connected to ground)
71	OUT-OPEN	O	(Connected to ground) Loading out detection signal output
72	B-TRG	O	B deck trigger motor control output
73	A-TRG	O	A deck trigger motor control output
74	CAP-M-COT2	O	Capstan motor REW/FWD/STOP signal output
75	CAP-M-COT1	O	Capstan motor REW/FWD/STOP signal output
76	CAP-M-H/L	O	Capstan motor High/Low speed select signal output
77	AMS-IN	I	AMS signal input
78	TC-MUTE	O	TC line mute ON/OFF selection output
79	R/PB/PAS	O	REC/PB/PASS selection output
80	NR-ON/OFF	O	DOLBY NR ON/OFF signal output
81	REC-MUTE	O	REC mute ON/OFF selection output
82	BIAS	O	Bias ON/OFF signal output
83	EQ-H/N	O	Equalizer High/Normal select output
84	PB-A/B	O	PB A deck/B deck select output
85	ALC	O	ALC ON/OFF output signal
86	B-PLAY-SW	I	B deck play detect
87	A-PLAY-SW	I	A deck play detect
88	A-HALF	I	A Deck half detector signal input
89	B-HALF	I	B Deck half detector signal input
90	B-SHUT	I	B Deck reel pulse detector
91	A-SHUT	I	A Deck reel pulse detector
92	SOFT-TEST	O	Software test port (Not used)
93	HP-MUTE	O	Head phone mute signal output
94	KEY/CD-ADJ	I	KEY (use the jig)/CD adjust point port
95	MODEL IN	I	MODEL input
96	AVSS	–	Analog ground
97	SPEC-IN	I	Specifications input
98	VREF	I	Analog reference voltage input
99	AVCC	–	Analog power supply (+5V)
100	TC-RELAY	O	REC/PB head selection output for IC602

• **IC601 DISPLAY CONTROL (TMP88CS76F-6000)**

Pin No.	Pin Name	I/O	Function
1	SIRCS	I	Remote commander signal input
2	JOG A	I	Rotary encoder (S702) pulse input
3	LED SCK	O	LED clock signal output
4	LED LATCH	O	LED latch signal output
5	LED DAT	O	LED serial data output
6	LED POWER	–	Not used
7	LED SEL	O	LED select signal output
8	JOG B	I	Rotary encoder (S702) pulse input
9	VOLUME A	I	Rotary encoder (S701) pulse input
10	VOLUME B	I	
11 to 15	KEY 0 to KEY 4	I	Key input
16 to 20	BPF 0 to BPF 4	I	Rec level signal input
21	ALL BAND	O	Rec level signal output for auto DBDF
22	WAKE UP	O	Gradation right/WAKE UP signal output
23	Vss	–	Ground
24	VAss	–	
25	VAref	I	Analog reference voltage input
26	VDD	–	Power supply (+5V)
27 to 40	GR 3 to GR 16	O	FL gride signal output
41	VDD VFT	–	Power supply (+5V) for VFT
42, 43	GR 1, GR 2	O	FL gride signal output
44	SEG 0	O	FL segment signal output (Not used)
45 to 67	SEG 1 to SEG 23	O	FL segment signal output
68	Vkk	–	Power supply (-25V) for FL segment signal output
69	Vdd	–	Power supply (+5V)
70	X in	I	X'tal (12.5MHz)
71	Vss	–	Ground
72	X out	O	X'tal (12.5MHz)
73	RESET	I	Reset signal input from main controller
74	DAILY LED	O	LED driver output
75	REC LED	O	
76	TEST	I	Connected ground
77	LED-ECO	O	LED driver output
78	I^2C DATA	I	I^2C SDA input from master controller
79	I^2C CLK	I	I^2C SCL input from master controller
80	D-SW	I	Door switch signal input

SECTION 8
EXPLODED VIEWS

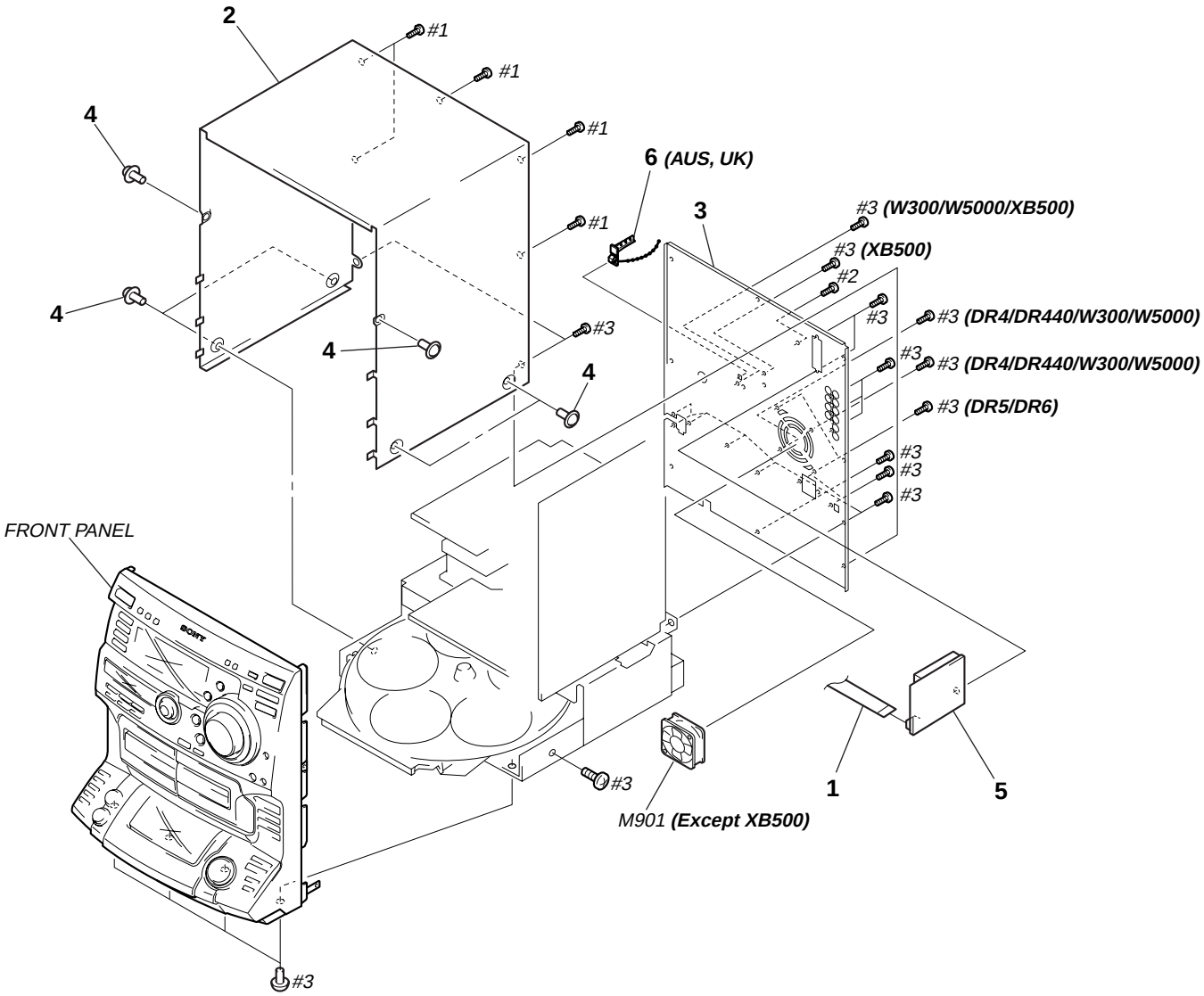
NOTE:
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- Abbreviation
  CND : Canadian model
  EA : Saudi Arabia model
  MX : Mexican model
  SP : Singapore model
  MY : Malaysia model
  AR : Argentine model
  TH : Thailand model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

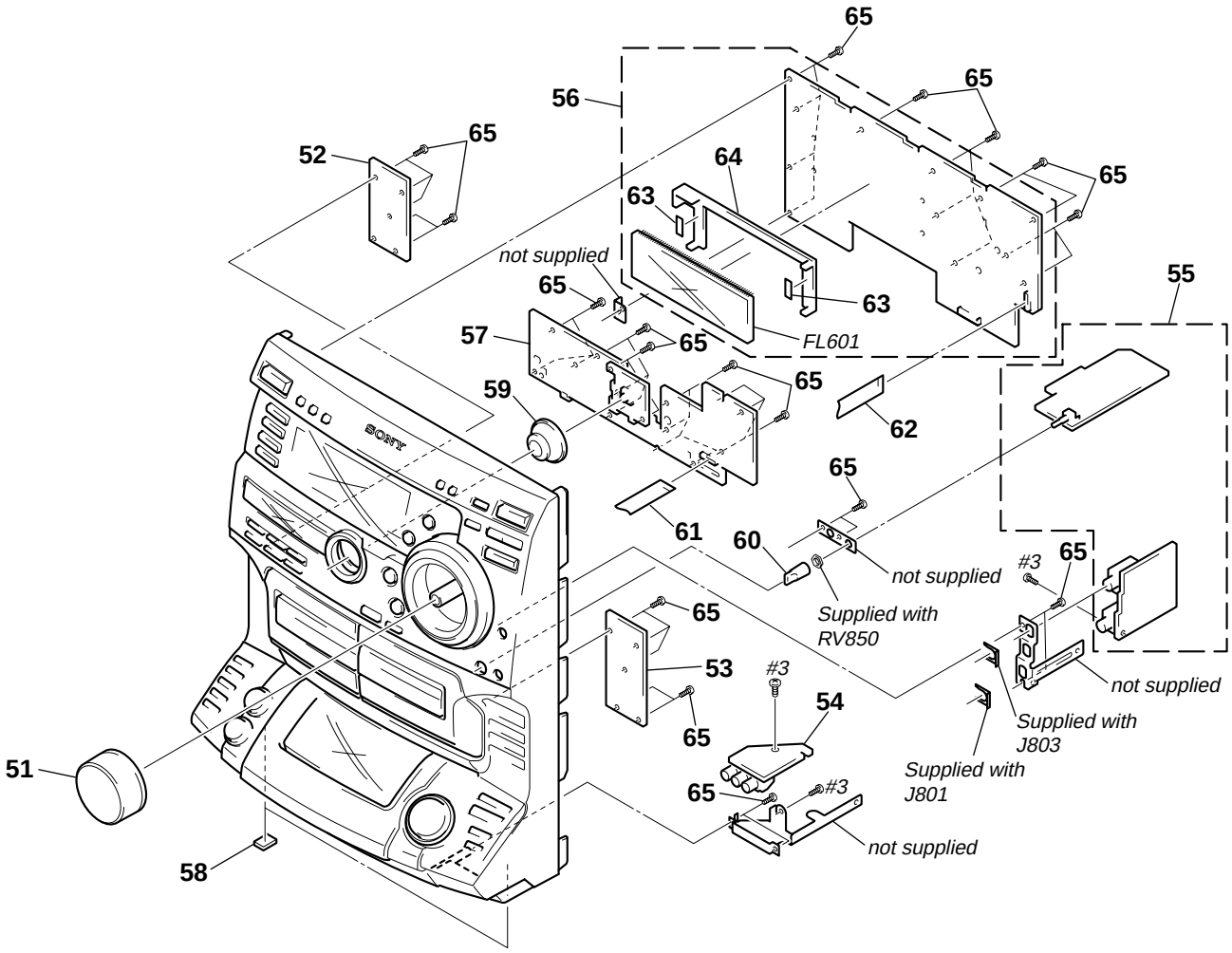
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

8-1. CASE AND BACK PANEL SECTION



Ref. No.	Part No.	Description	Remark
1	1-769-977-11	WIRE (FLAT TYPE) (13 CORE) (DR4/DR5/DR6/DR440/W300/W5000)	
1	1-773-009-11	WIRE (FLAT TYPE) (15 CORE)(XB500)	
* 2	4-214-777-11	CASE (DR4/DR5/DR6/W300/W5000/XB500)	
* 2	4-214-777-31	CASE (DR440)	
* 3	4-214-785-01	PANEL, BACK (XB500:AEP,UK) (Indonesia PRODUCT)	
* 3	4-214-785-21	PANEL, BACK (XB500:AEP)(Thai PRODUCT)	
* 3	4-214-786-01	PANEL, BACK (DR4:E,AR)	
* 3	4-214-786-11	PANEL, BACK (DR4:SP)	
* 3	4-214-786-21	PANEL, BACK (DR4:MX)	
* 3	4-214-786-31	PANEL, BACK (DR4:AUS)	
* 3	4-214-786-41	PANEL, BACK (DR4:EA)	
* 3	4-214-786-51	PANEL, BACK (DR5:E,AR)	
* 3	4-214-786-61	PANEL, BACK (DR5:SP)	
* 3	4-214-786-71	PANEL, BACK (DR5:MX)	
* 3	4-214-786-81	PANEL, BACK (DR440)	
* 3	4-214-787-41	PANEL, BACK (W300:US)	
* 3	4-214-787-51	PANEL, BACK (W300:CND)	
* 3	4-214-787-61	PANEL, BACK (W5000)	
* 3	4-214-788-31	PANEL, BACK (DR6:E,AR)	
* 3	4-214-788-41	PANEL, BACK (DR6:SP,MY)	
* 3	4-214-788-51	PANEL, BACK (DR6:MX)	
* 3	4-214-786-91	PANEL, BACK (DR4:TH)	
4	3-363-099-01	SCREW (CASE 3 TP2)	
5	1-233-545-11	TUNER (UNIT)(EA,SP,MY,AR,MX,AUS)	
5	1-693-443-11	TUNER (UNIT)(AEP,UK)	
5	1-693-445-11	TUNER (UNIT)(US,CND)	
5	1-693-453-11	TUNER (UNIT)(TH)	
6	4-956-370-12	BAND, PLUG FIXED (AUS,UK)	
M901	1-698-792-11	FAN, DC (DR4/DR440/W300/W5000)	
M901	1-763-072-11	FAN, DC (DR5/DR6)	

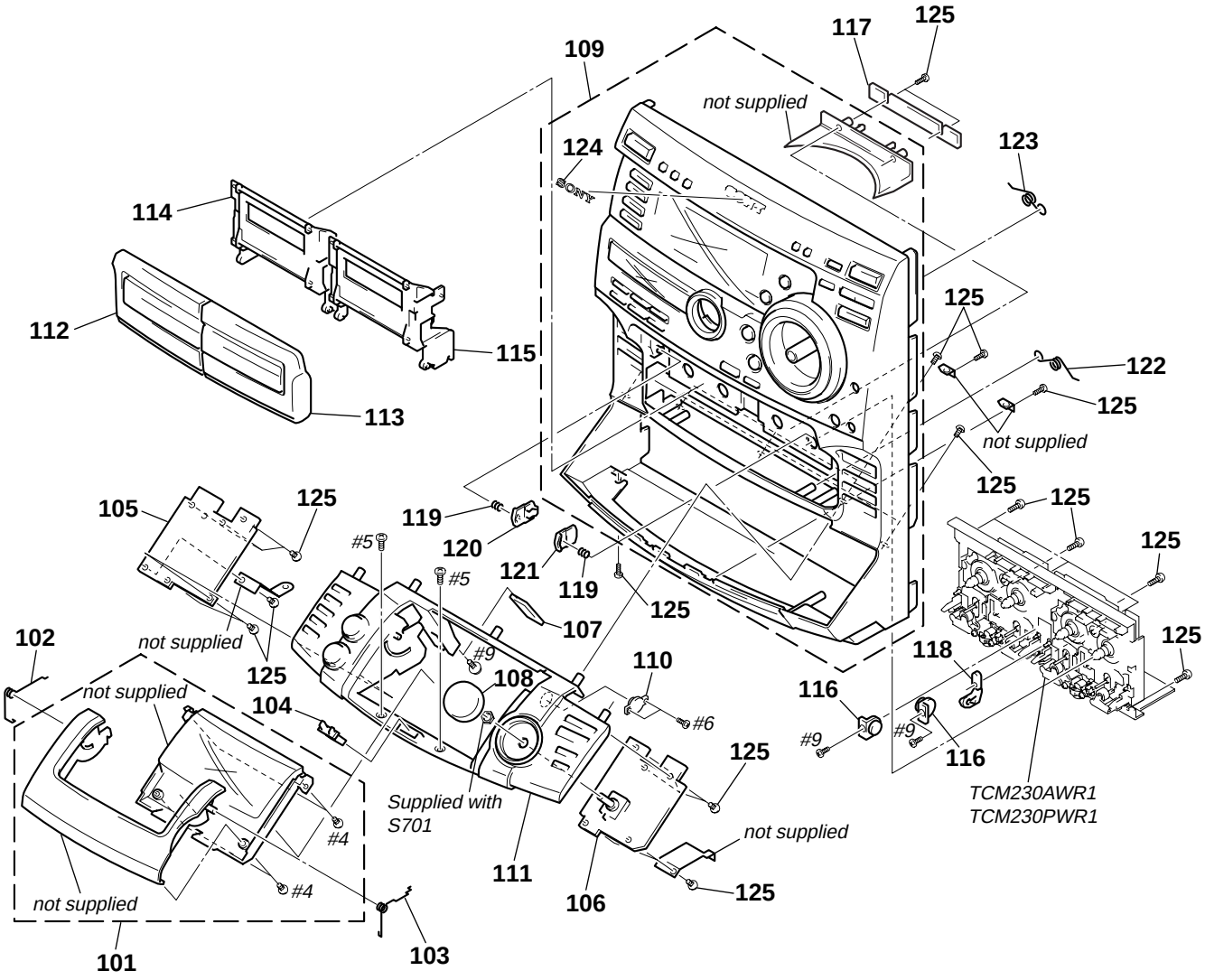
8-2. FRONT PANEL SECTION 1



Ref. No.	Part No.	Description	Remark
51	4-214-716-01	KNOB (VOL) (DR4/DR5/DR6/W300/W5000/XB500)	
51	4-214-716-11	KNOB (VOL)(DR44)	
* 52	1-672-193-11	TC-A BOARD	
* 53	1-672-194-11	TC-B BOARD	
* 54	1-672-190-11	FRONT INPUT BOARD	
* 55	A-4417-530-A	JACK BOARD, COMPLETE	
* 56	A-4417-499-A	PANEL FL BOARD, COMPLETE (W300/W5000)	
* 56	A-4417-510-A	PANEL FL BOARD, COMPLETE (XB500)	
* 56	A-4417-524-A	PANEL FL BOARD, COMPLETE (DR4/DR440)	
* 56	A-4417-570-A	PANEL FL BOARD, COMPLETE (DR5/DR6)	

Ref. No.	Part No.	Description	Remark
* 57	A-4417-536-A	PANEL-VR BOARD, COMPLETE	
58	4-948-236-21	CUSHION (107)	
59	4-214-717-01	CURSOR (DR4/DR5/DR6/W300/W5000/XB500)	
59	4-214-717-11	CURSOR (DR440)	
60	4-214-756-01	KNOB (MICROPHONE)	
61	1-773-002-11	WIRE (FLAT TYPE) (15 CORE)(80 mm)	
62	1-773-034-11	WIRE (FLAT TYPE) (15 CORE)(420 mm)	
* 63	4-949-935-81	CUSHION (FL)	
* 64	4-214-750-01	HOLDER (915), FL TUBE	
65	4-951-620-01	SCREW (2.6X8), +BVTP	
FL601	1-517-840-11	INDICATOR TUBE, FLUORESCENT	

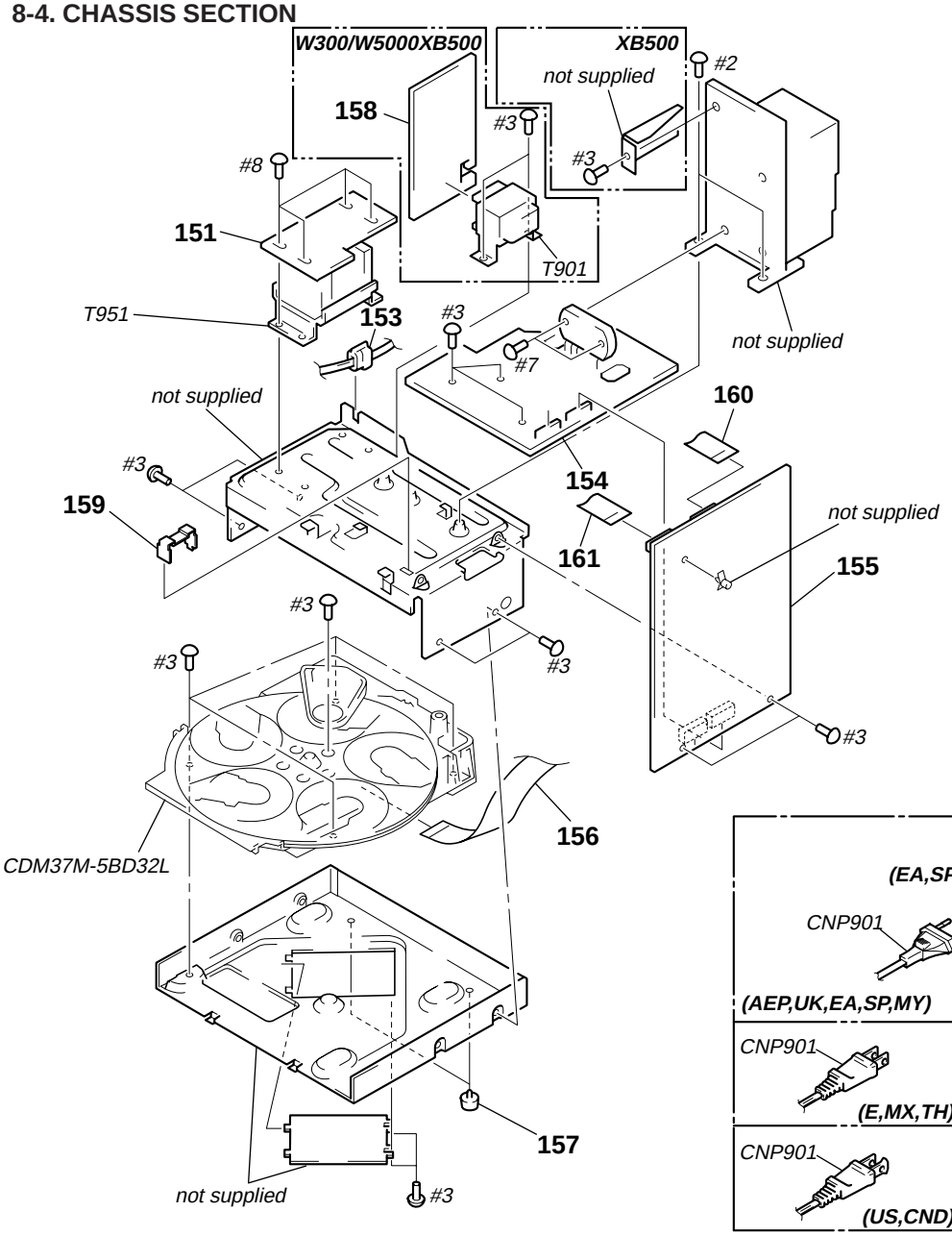
8-3. FRONT PANEL SECTION 2



Ref. No.	Part No.	Description	Remark
101	X-4950-635-1	LID ASSY, CD (DR4/DR5/DR6/W300/W5000/XB500)	
101	X-4950-878-1	LID ASSY, CD (DR440)	
102	4-214-773-01	SPRING (CD-L), TORSION	
103	4-214-774-01	SPRING (CD-R), TORSION	
104	4-040-472-01	LATCH, D.C.	
* 105	1-672-186-11	CD-L BOARD	
* 106	1-672-187-11	CD-R BOARD	
* 107	1-672-191-11	DOOR SWITCH BOARD	
108	4-214-718-01	KNOB (CD) (DR4/DR5/DR6/W300/W5000/XB500)	
108	4-214-718-11	KNOB (CD)(DR440)	
109	X-4950-617-1	PANEL ASSY, FRONT (DR4)	
109	X-4950-618-1	PANEL ASSY, FRONT (W300/W5000)	
109	X-4950-619-1	PANEL ASSY, FRONT (XB500)	
109	X-4950-620-1	PANEL ASSY, FRONT (DR5/DR6)	
109	X-4950-876-1	PANEL ASSY, FRONT (DR440)	
* 110	3-973-975-21	DAMPER, OIL	
111	X-4950-633-1	PANEL ASSY, SUB (DR4/DR5/DR6/W300/W5000/XB500)	
111	X-4950-877-1	PANEL ASSY, SUB (DR440)	
112	X-4950-653-1	LID (A) ASSY, CASSETTE (W300)	

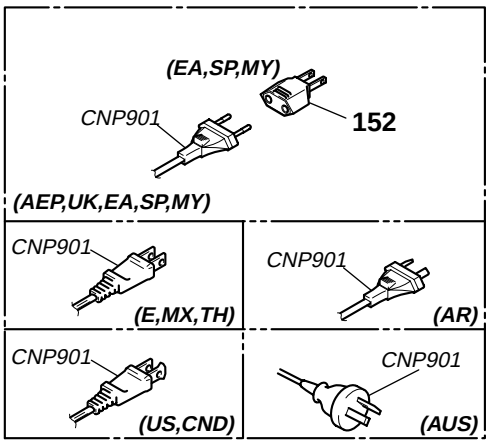
Ref. No.	Part No.	Description	Remark
112	X-4950-654-1	LID (A) ASSY, CASSETTE (XB500)	
112	X-4950-656-1	LID (A) ASSY, CASSETTE (W5000)	
112	X-4950-657-1	LID (A) ASSY, CASSETTE (DR4)	
112	X-4950-658-1	LID (A) ASSY, CASSETTE (DR5)	
112	X-4950-662-1	LID (A) ASSY, CASSETTE (DR6)	
112	X-4950-879-1	LID (A) ASSY, CASSETTE (DR440)	
113	X-4950-639-1	LID (B) ASSY, CASSETTE (DR4/DR5/DR6/W300/W5000/XB500)	
113	X-4950-664-1	LID ASSY, CASSETTE (DR440)	
114	X-4950-641-1	HOLDER (A) ASSY, CASSETTE	
115	X-4950-642-1	HOLDER (B) ASSY, CASSETTE	
116	4-210-045-02	DAMPER	
* 117	1-672-195-11	LED (PANEL) BOARD	
118	4-214-755-01	HOLDER (FULCRUM)	
119	4-214-775-01	SPRING, PUSH CATCHER RETURN	
120	4-214-760-01	CATCHER (A), PUSH	
121	4-214-761-01	CATCHER (B), PUSH	
122	4-214-769-01	SPRING (TC-B), TORSION	
123	4-214-768-01	SPRING (TC-A), TORSION	
124	4-214-759-01	EMBLEM (NO.6), SONY	
125	4-951-620-01	SCREW (2.6X8), +BVTP	

8-4. CHASSIS SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

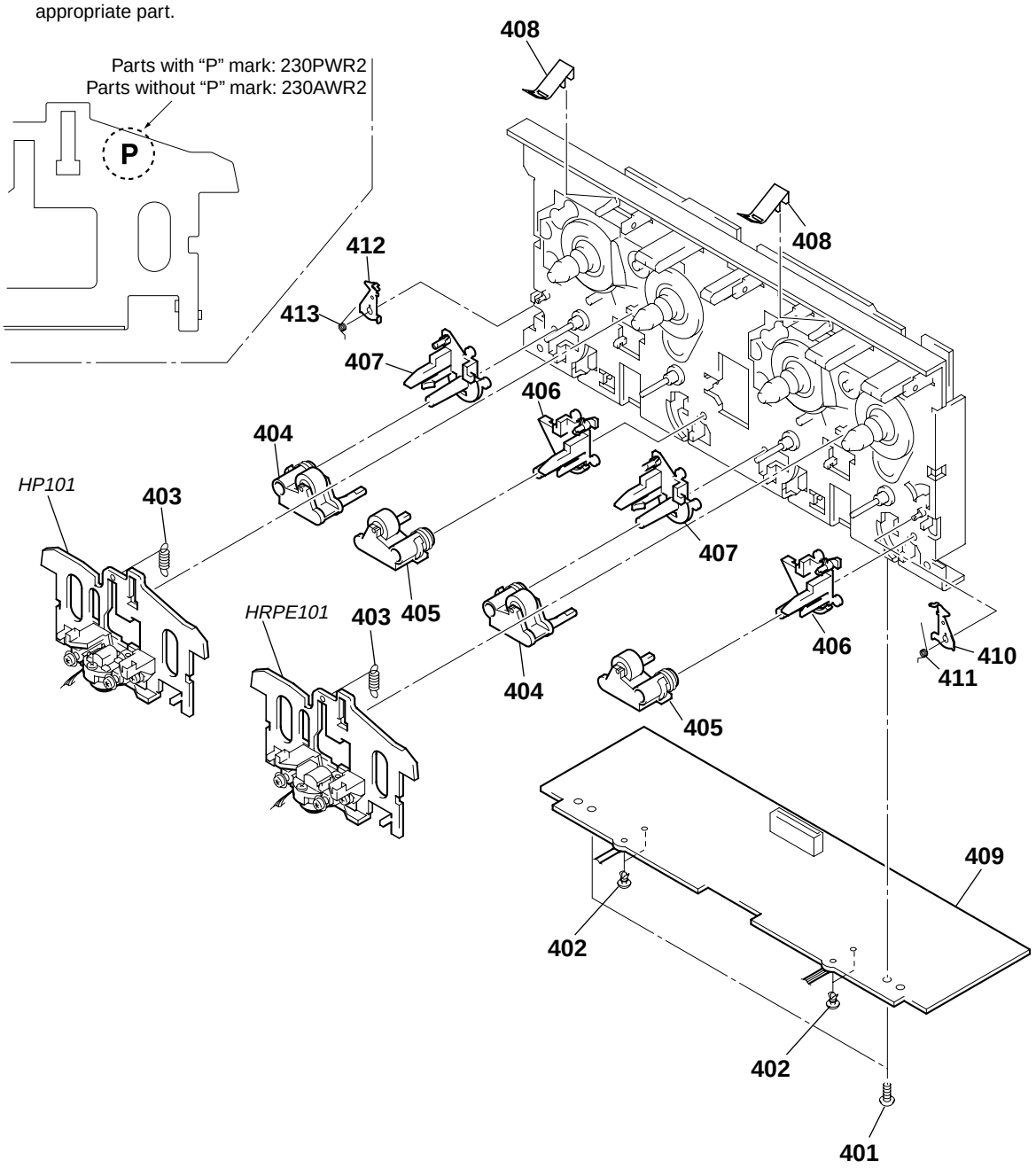


Ref. No.	Part No.	Description	Remark
* 151	1-672-430-11	TRANS BOARD (WA300/W5000/XB500)	
* 151	1-672-431-11	TRANS BOARD (DR4/DR5/DR6/DR440)	
152	1-569-008-21	ADAPTOR, CONVERSION 2P (EA,SP,MY)	
153	3-703-244-00	BUSHING (FBS001), CORD (EXCEPT E,TH,MX)	
153	4-966-266-01	BUSHING (S) (FBS002), CORD (E,TH,MX)	
* 154	A-4417-503-A	PA BOARD, COMPLETE (W300)	
* 154	A-4417-512-A	PA BOARD, COMPLETE (XB500)	
* 154	A-4417-537-A	PA BOARD, COMPLETE (DR4/DR440)	
* 154	A-4417-565-A	PA BOARD, COMPLETE (DR6)	
* 154	A-4417-572-A	PA BOARD, COMPLETE (DR5)	
* 154	A-4419-648-A	PA BOARD, COMPLETE (W5000)	
* 155	A-4417-496-A	MAIN BOARD, COMPLETE (W300/W5000)	
* 155	A-4417-507-A	MAIN BOARD, COMPLETE (XB500)	
* 155	A-4417-516-A	MAIN BOARD, COMPLETE (DR4:E,TH,AR,MX/DR440)	
* 155	A-4417-562-A	MAIN BOARD, COMPLETE (DR6:E,AR,MX)	
* 155	A-4417-567-A	MAIN BOARD, COMPLETE (DR5:E,AR,MX)	
* 155	A-4417-970-A	MAIN BOARD, COMPLETE (DR6:SP,MY)	
* 155	A-4417-974-A	MAIN BOARD, COMPLETE (DR5:SP)	
* 155	A-4417-988-A	MAIN BOARD, COMPLETE (DR4:SP,AUS)	

Ref. No.	Part No.	Description	Remark
* 155	A-4417-982-A	MAIN BOARD, COMPLETE (DR4:EA)	
156	1-790-287-11	WIRE (FLAT TYPE) (19 CORE)	
157	X-4941-228-1	FOOT (F22125H-M)	
* 158	1-672-432-11	SUB TRANS BOARD (W300/W5000/XB500)	
* 159	4-988-533-01	HOLDER, PWB	
160	1-773-006-11	WIRE (FLAT TYPE) (15 CORE)	
161	1-773-056-11	WIRE (FLAT TYPE) (17 CORE)	
⚠CNP901	1-558-943-41	CORD, POWER (E,MX,TH)	
⚠CNP901	1-575-042-21	CORD, POWER (CND)	
⚠CNP901	1-575-651-21	CORD, POWER (AEP,UK,EA,SP,MY)	
⚠CNP901	1-696-845-31	CORD, POWER (AUS)	
⚠CNP901	1-783-531-31	CORD, POWER (US)	
⚠CNP901	1-783-941-31	CORD, POWER (AR)	
⚠T901	1-433-615-11	TRANSFORMER, POWER (W300/W5000)	
⚠T901	1-433-616-11	TRANSFORMER, POWER (XB500)	
⚠T951	1-433-602-11	TRANSFORMER, POWER (W300/W5000)	
⚠T951	1-433-603-11	TRANSFORMER, POWER (XB500)	
⚠T951	1-433-604-11	TRANSFORMER, POWER (DR4/DR440)	
⚠T951	1-433-606-11	TRANSFORMER, POWER (DR5)	
⚠T951	1-433-611-11	TRANSFORMER, POWER (DR6)	

8-5. TC MECHANISM SECTION 1 (TCM230AWR2/230PWR2)

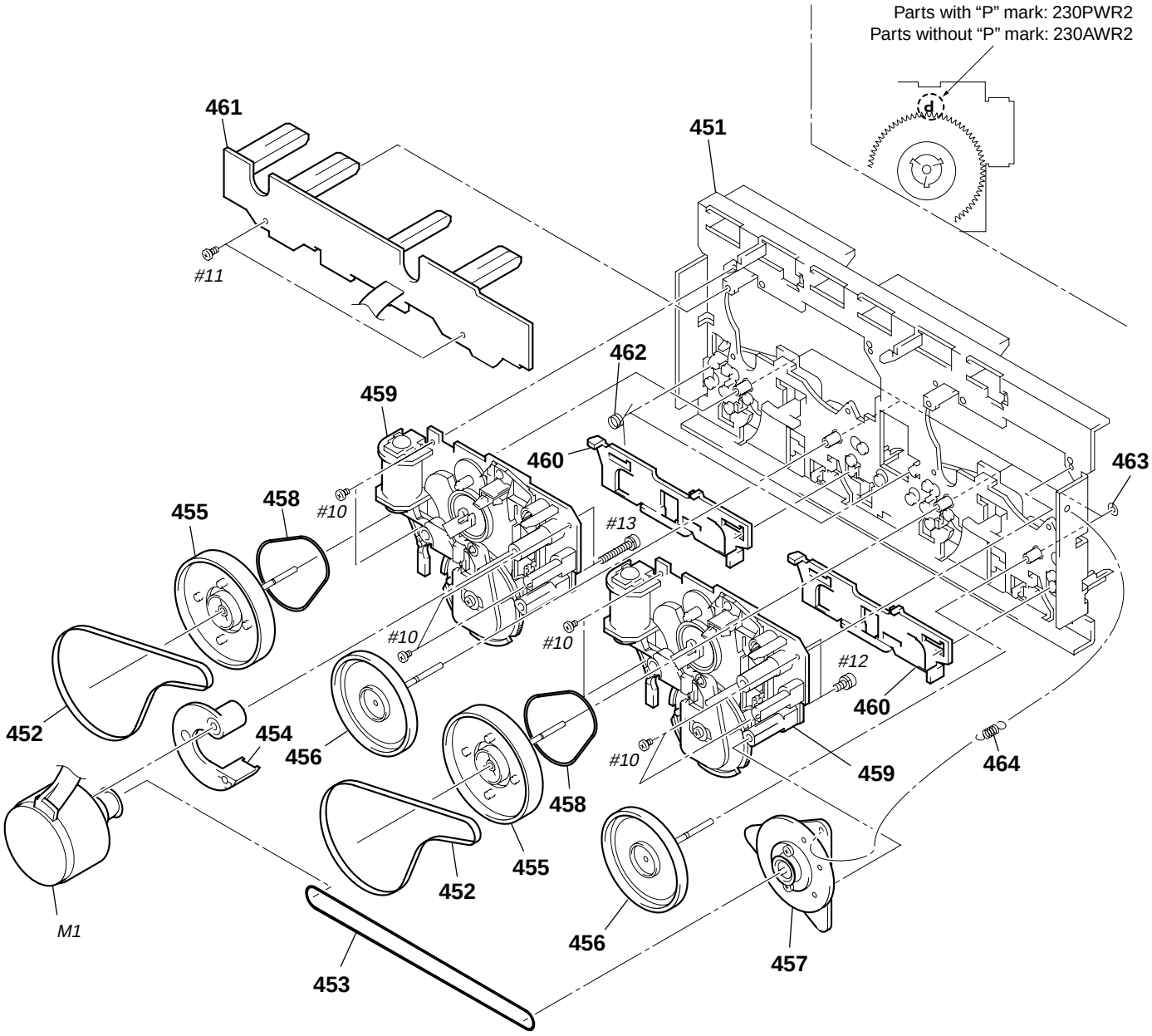
*NOTE: Two types of parts which are not interchangeable are available for the Head deck (A) ASSY and Head deck (B) ASSY. When replacing the parts, refer to the following figure, and use the appropriate part.



Ref. No.	Part No.	Description	Remark
401	3-376-464-11	SCREW(+PTT 2.6X6),GROUND POINT	
402	3-911-116-21	RIVET, PUSH	
403	3-016-574-01	SPRING (HEAD), TENSION	
404	X-3374-156-1	PINCH LEVER (REV) ASSY	
405	X-3374-155-1	PINCH LEVER (FWD) ASSY	
406	3-017-365-01	BASE (PINCH LEVER FWD)	
407	3-017-366-01	BASE (PINCH LEVER REV)	
408	3-026-892-01	SPRING (CASSETTE), LEAF	
409	A-2007-799-A	AUDIO BOARD, COMPLETE	
410	3-016-573-01	LEVER (EJECT PREVENTION R)	
411	3-032-810-02	SPRING (R), TORSION	
412	3-016-572-01	LEVER (EJECT PREVENTION L)	
413	3-032-809-02	SPRING (L), TORSION	
HP101	A-2056-681-B	DECK (A) ASSY, HEAD (230AWR2)(*NOTE)	
HP101	A-2056-683-B	DECK (A) ASSY, HEAD (230PWR2)(*NOTE)	
HRPE101	A-2056-682-B	DECK (B) ASSY, HEAD (230AWR2)(*NOTE)	
HRPE101	A-2056-684-B	DECK (B) ASSY, HEAD (230PWR2)(*NOTE)	

8-6. TC MECHANISM SECTION 2 (TCM230AWR2/230PWR2)

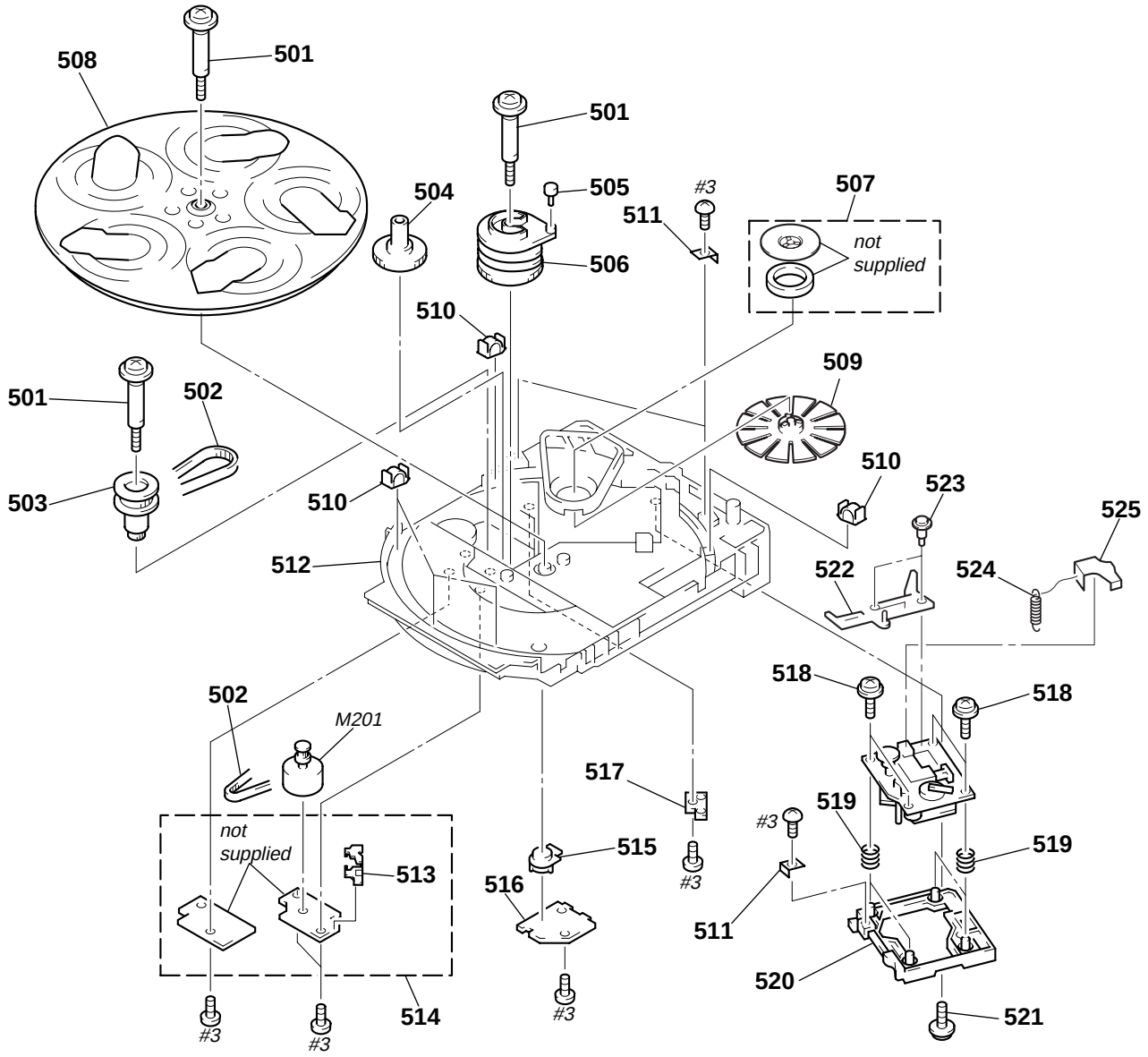
*NOTE: Two types of parts which are not interchangeable are available for the mechanical block assembly. When replacing the parts, refer to the following figure, and use the appropriate part.



Ref. No.	Part No.	Description	Remark
451	X-3374-214-1	CHASSIS ASSY, MAIN	
452	3-016-570-01	BELT (CAPSTAN)	
453	3-016-569-01	BELT (TENSION)	
* 454	3-016-568-01	BRACKET (MOTOR)	
455	X-3374-075-5	FLYWHEEL (FWD) ASSY	
456	X-3374-076-1	FLYWHEEL (REV) ASSY	
457	X-3374-157-1	PULLEY ASSY, TENSION	
458	3-024-405-01	BELT (FR2)	
459	A-2004-629-A	MECHANICAL BLOCK ASSY (230AWR2)(*NOTE)	

Ref. No.	Part No.	Description	Remark
459	A-2004-630-A	MECHANICAL BLOCK ASSY (230PWR2)(*NOTE)	
460	3-016-566-01	SLIDER, REVERSE	
461	A-2007-800-A	LEAF SW BOARD, COMPLETE	
462	3-016-575-01	SPRING, TORSION	
463	3-019-208-01	WASHER, STOPPER	
464	3-027-453-01	SPRING (GROUND), TENSION	
M1	A-2004-628-A	MOTOR ASSY, CAPSTAN	

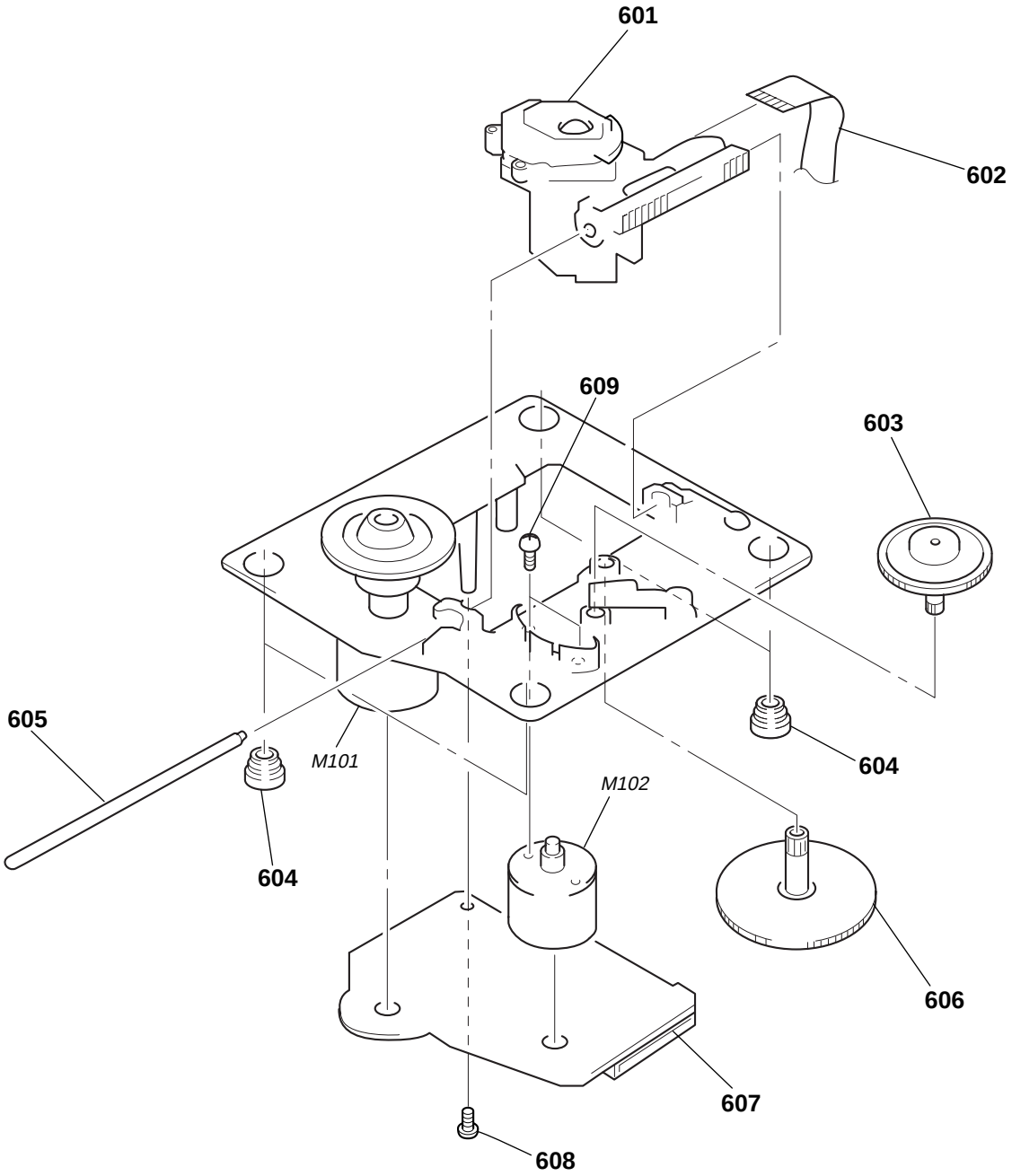
8-7. CD MECHANISM SECTION (CDM37M-5BD32L)



Ref. No.	Part No.	Description	Remark
501	4-987-976-01	SCREW, STEP	
502	4-944-490-01	BELT (TIMING)	
503	A-4660-978-A	GEAR (PULLEY) ASSY	
504	4-978-421-01	GEAR (MID)	
505	4-978-425-01	ROLLER (CAM)	
506	4-978-420-01	CAM (HOLDER)	
507	1-452-925-21	MAGNET ASSY	
508	4-978-417-01	TABLE, DISC	
509	4-993-142-11	PULLEY (L), PRESS	
510	X-4947-960-1	ROLLER ASSY	
* 511	4-978-583-01	BRACKET (BU)	
* 512	4-978-418-01	CHASSIS	
* 513	4-980-385-01	HOLDER (SW)	
* 514	A-4673-765-A	CD MOTOR BOARD, COMPLETE	

Ref. No.	Part No.	Description	Remark
515	4-978-426-01	INDICATOR (NO.)	
* 516	1-659-059-13	LED (CD) BOARD	
* 517	1-659-058-13	TABLE SENSOR BOARD	
518	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
519	4-958-593-01	SPRING (BU), COMPRESSION	
* 520	4-978-419-01	HOLDER (BU-5)	
521	4-998-716-01	SCREW, BU FITTING	
522	4-989-493-01	SLIDER (37)	
523	4-989-494-01	SCREW (SLIDER), STEP	
524	4-989-819-02	SPRING, TENSION	
525	4-989-491-21	COVER, LENS	
M201	A-4660-977-A	MOTOR ASSY (TABLE)	

8-8. BASE UNIT SECTION (BU-5BD32L)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
⚠601	8-820-020-02	OPTICAL PICK-UP KSS-213D/Q-NP	
602	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
603	4-917-567-21	GEAR (M)	
604	4-951-940-01	INSULATOR (BU)	
605	4-917-565-01	SHAFT, SLED	
606	4-917-564-01	GEAR (P), FLATNESS	

Ref. No.	Part No.	Description	Remark
* 607	A-4724-488-A	BD BOARD, COMPLETE	
608	4-951-620-01	SCREW (2.6X8), +BVTP	
609	3-713-786-51	SCREW +P 2X3	
M101	X-4917-523-3	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	

SECTION 9
ELECTRICAL PARTS LIST

AUDIO

Note:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: µ , for example:
  uA...: µ A..., uPA...: µ PA..., uPB...: µ PB..., uPC...: µ PC..., uPD...: µ PD...
- CAPACITORS
  uF : µ F
- COILS
  uH : µ H
- Abbreviation
  CND : Canadian model
  EA : Saudi Arabia model
  MX : Mexican model
  SP : Singapore model
  MY : Malaysia model
  AR : Argentine model
  TH : Thailand model

Ref. No.	Part No.	Description			Remark
	A-2007-799-A	AUDIO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C301	1-162-289-31	CERAMIC	390PF	10%	50V
C302	1-126-968-11	ELECT	100uF	20%	6.3V
C303	1-162-282-31	CERAMIC	100PF	10%	50V
C304	1-130-483-00	MYLAR	0.01uF	5%	50V
C305	1-107-715-11	ELECT	22uF	20%	16V
C311	1-162-289-31	CERAMIC	390PF	10%	50V
C313	1-162-282-31	CERAMIC	100PF	10%	50V
C314	1-130-487-00	MYLAR	0.022uF	5%	50V
C315	1-126-233-11	ELECT	22uF	20%	50V
C331	1-137-427-11	FILM	120PF	5%	50V
C332	1-162-288-31	CERAMIC	330PF	10%	50V
C333	1-162-209-31	CERAMIC	27PF	5%	50V
C401	1-162-289-31	CERAMIC	390PF	10%	50V
C402	1-126-968-11	ELECT	100uF	20%	6.3V
C403	1-162-282-31	CERAMIC	100PF	10%	50V
C404	1-130-483-00	MYLAR	0.01uF	5%	50V
C405	1-107-715-11	ELECT	22uF	20%	16V
C411	1-162-289-31	CERAMIC	390PF	10%	50V
C413	1-162-282-31	CERAMIC	100PF	10%	50V
C414	1-130-487-00	MYLAR	0.022uF	5%	50V
C415	1-126-233-11	ELECT	22uF	20%	50V
C431	1-137-427-11	FILM	120PF	5%	50V
C432	1-162-288-31	CERAMIC	330PF	10%	50V
C433	1-162-209-31	CERAMIC	27PF	5%	50V
C601	1-104-396-11	ELECT	10uF	20%	16V
C602	1-104-396-11	ELECT	10uF	20%	16V
C611	1-104-396-11	ELECT	10uF	20%	16V
C612	1-104-396-11	ELECT	10uF	20%	16V
C621	1-137-150-11	FILM	0.01uF	5%	100V
C622	1-126-961-11	ELECT	2.2uF	20%	50V
C623	1-136-155-00	FILM	0.015uF	5%	50V
C624	1-130-481-00	MYLAR	0.0068uF	5%	50V
C625	1-130-481-00	MYLAR	0.0068uF	5%	50V
C627	1-124-903-11	ELECT	1uF	20%	50V
C628	1-136-153-00	FILM	0.01uF	5%	50V
C642	1-104-664-11	ELECT	47uF	20%	16V
		< CONNECTOR >			
CN601	1-695-338-11	PIN, CONNECTOR (PC BOARD) 15P			

Ref. No.	Part No.	Description				Remark
		< IC >				
IC601	8-759-111-44	IC UPC4570C-1				
IC602	8-759-143-54	IC UPC1330HA				
IC611	8-759-111-44	IC UPC4570C-1				
		< COIL >				
L331	1-410-780-11	INDUCTOR	27mH			
L431	1-410-780-11	INDUCTOR	27mH			
L601	1-414-193-41	INDUCTOR	220uH			
L602	1-414-193-41	INDUCTOR	220uH			
		< TRANSISTOR >				
Q621	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q622	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q623	8-729-801-93	TRANSISTOR	2SD1387			
		< RESISTOR >				
R301	1-247-881-00	CARBON	120K	5%	1/4W	
R302	1-247-815-91	CARBON	220	5%	1/4W	
R303	1-247-863-91	CARBON	22K	5%	1/4W	
R304	1-247-889-00	CARBON	270K	5%	1/4W	
R305	1-247-858-11	CARBON	13K	5%	1/4W	
R311	1-247-881-00	CARBON	120K	5%	1/4W	
R312	1-247-807-31	CARBON	100	5%	1/4W	
R314	1-247-882-11	CARBON	130K	5%	1/4W	
R315	1-247-850-11	CARBON	6.2K	5%	1/4W	
R331	1-249-430-11	CARBON	12K	5%	1/4W	
R401	1-247-881-00	CARBON	120K	5%	1/4W	
R402	1-247-815-91	CARBON	220	5%	1/4W	
R403	1-247-863-91	CARBON	22K	5%	1/4W	
R404	1-247-889-00	CARBON	270K	5%	1/4W	
R405	1-247-858-11	CARBON	13K	5%	1/4W	
R411	1-247-881-00	CARBON	120K	5%	1/4W	
R412	1-247-807-31	CARBON	100	5%	1/4W	
R414	1-247-882-11	CARBON	130K	5%	1/4W	
R415	1-247-850-11	CARBON	6.2K	5%	1/4W	
R431	1-249-430-11	CARBON	12K	5%	1/4W	
R601	1-247-815-91	CARBON	220	5%	1/4W	
R602	1-247-815-91	CARBON	220	5%	1/4W	
R608	1-247-815-91	CARBON	220	5%	1/4W	
R609	1-247-863-91	CARBON	22K	5%	1/4W	
R611	1-247-815-91	CARBON	220	5%	1/4W	
R612	1-247-815-91	CARBON	220	5%	1/4W	
⚠R621	1-212-851-00	FUSIBLE	5.6	5%	1/4W	F
⚠R622	1-212-851-00	FUSIBLE	5.6	5%	1/4W	F

AUDIO BD

Ref. No.	Part No.	Description			Remark
R623	1-249-432-11	CARBON	18K	5%	1/4W
R624	1-249-432-11	CARBON	18K	5%	1/4W
R625	1-249-429-11	CARBON	10K	5%	1/4W
		< VARIABLE RESISTOR >			
RV301	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV311	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV341	1-241-768-11	RES, ADJ, CARBON 220K			
RV401	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV411	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV441	1-241-768-11	RES, ADJ, CARBON 220K			
		< TRANSFORMER >			
T621	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			

****

*	A-4724-488-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C102	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C103	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C104	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C108	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C109	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C110	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C111	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C112	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C113	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C114	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C115	1-126-607-11	ELECT CHIP	47uF	20%	4V
C116	1-126-607-11	ELECT CHIP	47uF	20%	4V
C117	1-126-209-11	ELECT CHIP	100uF	20%	4V
C118	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C119	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C121	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C122	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C123	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C124	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C125	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C126	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C127	1-128-065-11	ELECT CHIP	68uF	20%	10V
C128	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C129	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C130	1-164-346-11	CERAMIC CHIP	1uF		16V
C131	1-124-779-00	ELECT CHIP	10uF	20%	16V
C133	1-164-346-11	CERAMIC CHIP	1uF		16V
C140	1-164-346-11	CERAMIC CHIP	1uF		16V
C141	1-164-346-11	CERAMIC CHIP	1uF		16V
C143	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C151	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C153	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C154	1-110-501-11	CERAMIC CHIP	0.33uF	10%	16V
C156	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C157	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C159	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C161	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C162	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C163	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C165	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C167	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C168	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C171	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C172	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C181	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C182	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
		< CONNECTOR >			
CN101	1-778-874-11	CONNECTOR,FFC(LIF(NON-ZIF))19P			
CN102	1-777-937-11	CONNECTOR, FFC/FPC 16P			
		< FERRITE BEAD >			
FB101	1-500-445-21	FERRITE	0UH		
FB103	1-500-445-21	FERRITE	0UH		
		< IC >			
IC101	8-752-386-85	IC CXD2587Q			
IC102	8-759-549-28	IC BA5974FP-E2			
IC103	8-752-085-51	IC CXA2568M-T6			
		< TRANSISTOR >			
Q101	8-729-010-08	TRANSISTOR MSB710-R			
		< RESISTOR >			
R101	1-216-077-00	METAL CHIP	15K	5%	1/10W
R102	1-216-097-91	RES,CHIP	100K	5%	1/10W
R103	1-216-077-00	METAL CHIP	15K	5%	1/10W
R104	1-216-085-00	METAL CHIP	33K	5%	1/10W
R105	1-216-073-00	METAL CHIP	10K	5%	1/10W
R106	1-216-049-91	RES,CHIP	1K	5%	1/10W
R107	1-216-073-00	METAL CHIP	10K	5%	1/10W
R108	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R109	1-216-121-91	RES,CHIP	1M	5%	1/10W
R110	1-216-025-91	RES,CHIP	100	5%	1/10W
R111	1-216-121-91	RES,CHIP	1M	5%	1/10W
R113	1-216-121-91	RES,CHIP	1M	5%	1/10W
R114	1-216-073-00	METAL CHIP	10K	5%	1/10W
R116	1-216-001-00	METAL CHIP	10	5%	1/10W
R117	1-216-049-91	RES,CHIP	1K	5%	1/10W
R119	1-216-041-00	METAL CHIP	470	5%	1/10W
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W
R124	1-216-097-91	RES,CHIP	100K	5%	1/10W
R131	1-216-033-00	METAL CHIP	220	5%	1/10W
R143	1-216-103-00	METAL CHIP	180K	5%	1/10W
R144	1-216-103-00	METAL CHIP	180K	5%	1/10W
R147	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R148	1-216-001-00	METAL CHIP	10	5%	1/10W
R149	1-216-001-00	METAL CHIP	10	5%	1/10W
R158	1-216-111-00	METAL CHIP	390K	5%	1/10W
R159	1-216-101-00	METAL CHIP	150K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R161	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R162	1-216-101-00	METAL CHIP	150K	5%	1/10W
R171	1-216-078-00	RES,CHIP	16K	5%	1/10W
R172	1-216-073-00	METAL CHIP	10K	5%	1/10W
R173	1-216-077-00	METAL CHIP	15K	5%	1/10W
R181	1-216-078-00	RES,CHIP	16K	5%	1/10W
R182	1-216-073-00	METAL CHIP	10K	5%	1/10W
R183	1-216-077-00	METAL CHIP	15K	5%	1/10W
		< NETWORK >			
RN101	1-233-576-11	RES, CHIP NETWORK 100			
RN102	1-233-576-11	RES, CHIP NETWORK 100			
		< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT SW)			
		< VIBRATOR >			
X101	1-767-408-21	VIBRATOR, CRYSTAL (16.9344MHz)			
**********					
*	1-672-186-11	CD-L BOARD **********			
		< CONNECTOR >			
CN812	1-785-332-11	PIN, CONNECTOR (LIGHT ANGLE)6P			
		< DIODE >			
D641	8-719-058-04	DIODE SEL5223S-TP15 (NON-STOP)			
		< RESISTOR >			
R731	1-249-410-11	CARBON	270	5%	1/4W F
R732	1-249-411-11	CARBON	330	5%	1/4W
R733	1-249-413-11	CARBON	470	5%	1/4W F
R734	1-249-414-11	CARBON	560	5%	1/4W F
R735	1-249-415-11	CARBON	680	5%	1/4W F
R736	1-249-417-11	CARBON	1K	5%	1/4W F
R742	1-249-427-11	CARBON	6.8K	5%	1/4W F
R743	1-249-429-11	CARBON	10K	5%	1/4W
R744	1-249-431-11	CARBON	15K	5%	1/4W
R745	1-249-407-11	CARBON	150	5%	1/4W F
		< SWITCH >			
S661	1-554-303-21	SWITCH, TACTILE (DISC 1)			
S662	1-554-303-21	SWITCH, TACTILE (DISC 2)			
S663	1-554-303-21	SWITCH, TACTILE (DISC 3)			
S664	1-554-303-21	SWITCH, TACTILE (DISC 4)			
S665	1-554-303-21	SWITCH, TACTILE (DISC 5)			
S666	1-554-303-21	SWITCH, TACTILE (FLASH)			
S672	1-554-303-21	SWITCH, TACTILE (EDIT)			
S673	1-554-303-21	SWITCH, TACTILE (NON-STOP)			
S674	1-554-303-21	SWITCH, TACTILE (LOOP)			
S702	1-473-534-11	ENCODER, ROTARY (I◄◄ AMS ►►I)			
**********					

Ref. No.	Part No.	Description			Remark
*	A-4673-765-A	CD MOTOR BOARD, COMPLETE **********			
*	4-980-385-01	HOLDER (SW)			
		< CAPACITOR >			
C201	1-124-907-11	ELECT	10uF	20%	50V
C202	1-164-159-21	CERAMIC	0.1uF		50V
C203	1-124-907-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
* CN201	1-568-947-11	PIN, CONNECTOR 9P			
		< IC >			
IC201	8-759-365-94	IC TA8409S			
		< COIL >			
L201	1-408-117-00	INDUCTOR	10uH		
		< RESISTOR >			
R205	1-249-427-11	CARBON	6.8K	5%	1/4W F
R206	1-249-425-11	CARBON	4.7K	5%	1/4W F
		< SWITCH >			
S201	1-762-587-11	SWITCH, PUSH (1 KEY)(UP SWITCH)			
**********					
*	1-672-187-11	CD-R BOARD **********			
		< CAPACITOR >			
C613	1-162-306-11	CERAMIC	0.01uF	20%	16V
C614	1-162-306-11	CERAMIC	0.01uF	20%	16V
		< CONNECTOR >			
CN703	1-785-333-11	PIN, CONNECTOR (LIGHT ANGLE)7P			
		< DIODE >			
D700	8-719-056-13	DIODE SML79423C-TP15 (▷II)			
		< RESISTOR >			
R751	1-247-843-11	CARBON	3.3K	5%	1/4W
R752	1-249-425-11	CARBON	4.7K	5%	1/4W F
R753	1-249-427-11	CARBON	6.8K	5%	1/4W F
R754	1-249-429-11	CARBON	10K	5%	1/4W
R755	1-249-431-11	CARBON	15K	5%	1/4W
R756	1-249-434-11	CARBON	27K	5%	1/4W
R757	1-249-438-11	CARBON	56K	5%	1/4W
R758	1-247-804-11	CARBON	75	5%	1/4W
R759	1-247-804-11	CARBON	75	5%	1/4W
		< SWITCH >			
S676	1-554-303-21	SWITCH, TACTILE (PLAY MODE)			
S677	1-554-303-21	SWITCH, TACTILE (REPEAT)			
S678	1-554-303-21	SWITCH, TACTILE (◁◁)			

Ref. No.	Part No.	Description				Remark
S679	1-554-303-21	SWITCH, TACTILE (▷▷)				
S681	1-554-303-21	SWITCH, TACTILE (▷II)				
S682	1-554-303-21	SWITCH, TACTILE (□)				
S683	1-554-303-21	SWITCH, TACTILE (DISC SKIP)				
**********						
*	1-672-191-11	DOOR SWITCH BOARD				
		**********				
		< CAPACITOR >				
C691	1-162-306-11	CERAMIC	0.01uF	20%	16V	
		< SWITCH >				
S691	1-771-057-11	SWITCH, PUSH (1 KEY)(⏏ OPEN)				
**********						
*	1-672-190-11	FRONT INPUT BOARD				
		**********				
		< CAPACITOR >				
C801	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C802	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C811	1-162-282-31	CERAMIC	100PF	10%	50V	
C812	1-164-159-21	CERAMIC	0.1uF		50V	
C813	1-126-960-11	ELECT	1uF	20%	50V	
		< FLUORESCENT INDICATOR >				
FL803	1-424-228-11	FILTER, NOISE				
		< JACK >				
J804	1-764-592-41	JACK 3P (AUDIO L/R, VIDEO)				
		< RESISTOR >				
R801	1-249-417-11	CARBON	1K	5%	1/4W	F
R802	1-249-437-11	CARBON	47K	5%	1/4W	
R803	1-249-417-11	CARBON	1K	5%	1/4W	F
R804	1-249-437-11	CARBON	47K	5%	1/4W	
R805	1-247-804-11	CARBON	75	5%	1/4W	
**********						
*	A-4417-530-A	JACK BOARD, COMPLETE				
		**********				
		< CAPACITOR >				
C804	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C805	1-126-961-11	ELECT	2.2uF	20%	50V	
C807	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C808	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C809	1-164-159-21	CERAMIC	0.1uF		50V	
C810	1-164-159-21	CERAMIC	0.1uF		50V	
C856	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C857	1-162-215-31	CERAMIC	47PF	5%	50V	
C858	1-126-964-11	ELECT	10uF	20%	50V	
C859	1-126-961-11	ELECT	2.2uF	20%	50V	
C860	1-162-215-31	CERAMIC	47PF	5%	50V	
C861	1-162-282-31	CERAMIC	100PF	10%	50V	
C862	1-126-961-11	ELECT	2.2uF	20%	50V	
C863	1-126-960-11	ELECT	1uF	20%	50V	
C864	1-126-964-11	ELECT	10uF	20%	50V	
C882	1-162-290-31	CERAMIC	470PF	10%	50V	
C883	1-162-306-11	CERAMIC	0.01uF	20%	16V	
		< CONNECTOR >				
CN802	1-785-316-11	PIN, CONNECTOR (STRAIGHT) 4P				
		< GROUND TERMINAL >				
* EPT802	1-537-738-21	TERMINAL, EARTH				
		< FLUORESCENT INDICATOR >				
FL801	1-424-228-11	FILTER, NOISE				
FL802	1-424-228-11	FILTER, NOISE				
		< IC >				
IC850	8-759-634-50	IC M5218AL				
		< JACK >				
J801	1-770-226-11	JACK (LARGE TYPE)(MIX MIC)				
J803	1-770-226-11	JACK (LARGE TYPE)(PHONES)				
		< RESISTOR >				
R807	1-249-429-11	CARBON	10K	5%	1/4W	
R809	1-249-417-11	CARBON	1K	5%	1/4W	F
R810	1-247-807-31	CARBON	100	5%	1/4W	
R850	1-247-807-31	CARBON	100	5%	1/4W	
R852	1-249-441-11	CARBON	100K	5%	1/4W	
R853	1-249-417-11	CARBON	1K	5%	1/4W	F
R854	1-247-863-91	CARBON	22K	5%	1/4W	
R855	1-249-429-11	CARBON	10K	5%	1/4W	
R856	1-247-885-00	CARBON	180K	5%	1/4W	
R857	1-247-807-31	CARBON	100	5%	1/4W	
		< VARIABLE RESISTOR >				
RV850	1-225-587-11	RES, VAR, CARBON 50K				
**********						
*	1-659-059-13	LED (CD) BOARD				
		**********				
		< DIODE >				
D201	8-719-032-98	DIODE SEL5820A (DISC NO.)				
		< TRANSISTOR >				
Q201	8-729-119-78	TRANSISTOR 2SC403SP-51				
		< RESISTOR >				
R201	1-247-863-91	CARBON	22K	5%	1/4W	
R202	1-249-411-11	CARBON	330	5%	1/4W	
R203	1-249-437-11	CARBON	47K	5%	1/4W	
**********						

Ref. No.	Part No.	Description			Remark
*	1-672-195-11	LED (PANEL) BOARD			
		**********			
		< DIODE >			
D671	8-719-058-03	DIODE SEL5423E-TP15 (DISC TABLE)			
D672	8-719-058-03	DIODE SEL5423E-TP15 (DISC TABLE)			
D673	8-719-058-03	DIODE SEL5423E-TP15 (DISC TABLE)			
D674	8-719-058-03	DIODE SEL5423E-TP15 (DISC TABLE)			
D675	8-719-058-03	DIODE SEL5423E-TP15 (DISC TABLE)			
		< RESISTOR >			
R600	1-249-410-11	CARBON	270	5%	1/4W F
**********					
*	A-4417-496-A	MAIN BOARD, COMPLETE (W300/W5000)			
		**********			
*	A-4417-507-A	MAIN BOARD, COMPLETE (XB500)			
		**********			
*	A-4417-516-A	MAIN BOARD, COMPLETE			
		**********			
		(DR4:E,TH,AR,MX/DR440)			
*	A-4417-562-A	MAIN BOARD, COMPLETE (DR6:E,AR,MX)			
		**********			
*	A-4417-567-A	MAIN BOARD, COMPLETE (DR5:E,AR,MX)			
		**********			
*	A-4417-970-A	MAIN BOARD, COMPLETE (DR6:SP,MY)			
		**********			
*	A-4417-974-A	MAIN BOARD, COMPLETE (DR5:SP)			
		**********			
*	A-4417-982-A	MAIN BOARD, COMPLETE (DR4:EA)			
		**********			
*	A-4417-988-A	MAIN BOARD, COMPLETE (DR4:SP,AUS)			
		**********			
	4-875-327-31	HEAT SINK			
	4-951-620-01	SCREW (2.6X8), +BVTP			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
C111	1-137-195-11	FILM	0.56uF	5%	50V
C112	1-136-158-00	FILM	0.027uF	5%	50V
C113	1-136-167-00	FILM	0.15uF	5%	50V
C114	1-130-480-00	MYLAR	0.0056uF	5%	50V
C115	1-136-159-00	FILM	0.033uF	5%	50V
C116	1-130-473-00	MYLAR	0.0015uF	5%	50V
C117	1-136-153-00	FILM	0.01uF	5%	50V
C118	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C119	1-130-479-00	MYLAR	0.0047uF	5%	50V
C120	1-130-477-00	MYLAR	0.0033uF	5%	50V
C121	1-126-964-11	ELECT	10uF	20%	50V
C122	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C123	1-136-169-00	FILM	0.22uF	5%	50V
C124	1-136-169-00	FILM	0.22uF	5%	50V
C125	1-126-964-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
C131	1-104-664-11	ELECT	47uF	20%	16V
C132	1-104-664-11	ELECT	47uF	20%	16V
C135	1-126-964-11	ELECT	10uF	20%	50V
C161	1-137-195-11	FILM	0.56uF	5%	50V
C162	1-136-158-00	FILM	0.027uF	5%	50V
C163	1-136-167-00	FILM	0.15uF	5%	50V
C164	1-130-480-00	MYLAR	0.0056uF	5%	50V
C165	1-136-159-00	FILM	0.033uF	5%	50V
C166	1-130-473-00	MYLAR	0.0015uF	5%	50V
C167	1-136-153-00	FILM	0.01uF	5%	50V
C168	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C169	1-130-479-00	MYLAR	0.0047uF	5%	50V
C170	1-130-477-00	MYLAR	0.0033uF	5%	50V
C171	1-126-964-11	ELECT	10uF	20%	50V
C172	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C173	1-136-169-00	FILM	0.22uF	5%	50V
C174	1-136-169-00	FILM	0.22uF	5%	50V
C175	1-126-964-11	ELECT	10uF	20%	50V
C176	1-136-495-11	FILM	0.068uF	5%	50V
C177	1-136-153-00	FILM	0.01uF	5%	50V
C181	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C182	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C183	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C191	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C193	1-126-964-11	ELECT	10uF	20%	50V
C301	1-126-960-11	ELECT	1uF	20%	50V
C302	1-130-479-00	MYLAR	0.0047uF	5%	50V
C303	1-136-165-00	FILM	0.1uF	5%	50V
C304	1-136-165-00	FILM	0.1uF	5%	50V
C305	1-126-964-11	ELECT	10uF	20%	50V
C306	1-126-960-11	ELECT	1uF	20%	50V
C307	1-126-959-11	ELECT	0.47uF	20%	50V
C308	1-126-964-11	ELECT	10uF	20%	50V
C309	1-137-194-81	FILM	0.47uF	5%	50V
C310	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C311	1-126-964-11	ELECT	10uF	20%	50V
C312	1-126-959-11	ELECT	0.47uF	20%	50V
C313	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C314	1-126-964-11	ELECT	10uF	20%	50V
C315	1-126-963-11	ELECT	4.7uF	20%	50V
C316	1-104-665-11	ELECT	100uF	20%	10V
C317	1-104-665-11	ELECT	100uF	20%	10V
C320	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C333	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C334	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C351	1-126-960-11	ELECT	1uF	20%	50V
C352	1-130-479-00	MYLAR	0.0047uF	5%	50V
C353	1-136-165-00	FILM	0.1uF	5%	50V
C354	1-136-165-00	FILM	0.1uF	5%	50V
C355	1-126-964-11	ELECT	10uF	20%	50V
C356	1-126-960-11	ELECT	1uF	20%	50V
C357	1-126-959-11	ELECT	0.47uF	20%	50V
C358	1-126-964-11	ELECT	10uF	20%	50V
C359	1-137-194-81	FILM	0.47uF	5%	50V
C401	1-126-961-11	ELECT	2.2uF	20%	50V
C411	1-163-033-91	CERAMIC CHIP	0.022uF		50V
C412	1-163-033-91	CERAMIC CHIP	0.022uF		50V

MAIN

Ref. No.	Part No.	Description			Remark
C413	1-126-916-11	ELECT	1000uF	20%	6.3V
C414	1-126-916-11	ELECT	1000uF	20%	6.3V
C415	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C416	1-126-925-11	ELECT	470uF	20%	10V
C451	1-126-961-11	ELECT	2.2uF	20%	50V
C510	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C511	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C516	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C562	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C564	1-104-665-11	ELECT	100uF	20%	10V
C598	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C599	1-104-665-11	ELECT	100uF	20%	10V
C601	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C602	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C603	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C604	1-126-961-11	ELECT	2.2uF	20%	50V
					(DR4/DR5/DR6/DR440)
C604	1-126-963-11	ELECT	4.7uF	20%	50V
					(W300/W5000/XB500)
C605	1-130-479-00	MYLAR	0.0047uF	5%	50V
C606	1-130-473-00	MYLAR	0.0015uF	5%	50V
C607	1-136-159-00	FILM	0.033uF	5%	50V
					(DR4/DR5/DR6/DR440)
C607	1-136-165-00	FILM	0.1uF	5%	50V
					(W300/W5000/XB500)
C608	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C609	1-126-933-11	ELECT	100uF	20%	16V
C651	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C652	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C653	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C654	1-126-961-11	ELECT	2.2uF	20%	50V
					(DR4/DR5/DR6/DR440)
C654	1-126-963-11	ELECT	4.7uF	20%	50V
					(W300/W5000/XB500)
C655	1-130-479-00	MYLAR	0.0047uF	5%	50V
C656	1-130-473-00	MYLAR	0.0015uF	5%	50V
C657	1-136-159-00	FILM	0.033uF	5%	50V
					(DR4/DR5/DR6/DR440)
C657	1-136-165-00	FILM	0.1uF	5%	50V
					(W300/W5000/XB500)
C658	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C659	1-126-933-11	ELECT	100uF	20%	16V
C701	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C702	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C703	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C721	1-126-960-11	ELECT	1uF	20%	50V
C722	1-126-926-11	ELECT	1000uF	20%	10V
C724	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C751	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C752	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C753	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C772	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C774	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C777	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C782	1-104-665-11	ELECT	100uF	20%	10V
C803	1-126-964-11	ELECT	10uF	20%	50V
C804	1-136-165-00	FILM	0.1uF	5%	50V
C805	1-136-165-00	FILM	0.1uF	5%	50V

Ref. No.	Part No.	Description			Remark
C806	1-126-916-11	ELECT	1000uF	20%	6.3V
C808	1-109-953-11	ELECT	2.2uF	20%	50V
C902	1-126-937-11	ELECT	4700uF	20%	16V
C903	1-126-964-11	ELECT	10uF	20%	50V
C904	1-126-964-11	ELECT	10uF	20%	50V
C905	1-126-924-11	ELECT	330uF	20%	10V
C911	1-126-964-11	ELECT	10uF	20%	50V
C912	1-126-916-11	ELECT	1000uF	20%	6.3V
C913	1-104-665-11	ELECT	100uF	20%	10V
C914	1-126-916-11	ELECT	1000uF	20%	6.3V
C932	1-126-964-11	ELECT	10uF	20%	50V
C933	1-126-933-11	ELECT	100uF	20%	16V
C934	1-126-964-11	ELECT	10uF	20%	50V
C935	1-126-767-11	ELECT	1000uF	20%	16V
C936	1-126-964-11	ELECT	10uF	20%	50V
C937	1-104-665-11	ELECT	100uF	20%	10V
C938	1-126-933-11	ELECT	100uF	20%	16V
C952	1-126-943-11	ELECT	2200uF	20%	25V
C953	1-126-964-11	ELECT	10uF	20%	50V
C954	1-126-964-11	ELECT	10uF	20%	50V
C955	1-126-924-11	ELECT	330uF	20%	10V
C961	1-163-038-91	CERAMIC CHIP	0.1uF		25V
					(DR4/DR5/DR6/DR440/W300/W5000)
		< CONNECTOR >			
CN303	1-784-776-11	CONNECTOR, FFC 15P			
CN304	1-784-778-11	CONNECTOR, FFC 17P			
CN411	1-784-780-11	CONNECTOR, FFC 19P			
CN412	1-785-321-11	PIN, CONNECTOR (STRAIGHT) 9P			
CN431	1-784-776-11	CONNECTOR, FFC 15P			
CN441	1-750-745-11	CONNECTOR, FFC/FPC 13P			
					(DR4/DR5/DR6/DR440/W300/W5000)
CN441	1-750-747-11	CONNECTOR, FFC/FPC 15P (XB500)			
CN452	1-785-316-11	PIN, CONNECTOR (STRAIGHT) 4P			
CN702	1-691-767-11	PLUG (MICRO CONNECTOR) 5P			
CN901	1-778-982-11	CONNECTOR, BOARD TO BOARD 13P			
* CN902	1-770-729-11	CONNECTOR, BOARD TO BOARD 10P			
					(DR4/DR5/DR6/DR440)
CN902	1-770-731-11	CONNECTOR, BOARD TO BOARD 12P			
					(W300/W5000/XB500)
* CN903	1-564-518-11	PLUG, CONNECTOR 3P			
					(DR4/DR5/DR6/DR440/W300/W5000)
		< DIODE >			
D333	8-719-988-61	DIODE 1SS355TE-17			
D334	8-719-988-61	DIODE 1SS355TE-17			
D335	8-719-988-61	DIODE 1SS355TE-17			
D336	8-719-988-61	DIODE 1SS355TE-17			
D501	8-719-988-61	DIODE 1SS355TE-17			
D534	8-719-988-61	DIODE 1SS355TE-17			
D544	8-719-988-61	DIODE 1SS355TE-17			
D801	8-719-988-61	DIODE 1SS355TE-17			
D802	8-719-988-61	DIODE 1SS355TE-17			
D803	8-719-988-61	DIODE 1SS355TE-17			
D804	8-719-988-61	DIODE 1SS355TE-17			
D805	8-719-988-61	DIODE 1SS355TE-17			
D806	8-719-988-61	DIODE 1SS355TE-17			
D807	8-719-988-61	DIODE 1SS355TE-17			

Ref. No.	Part No.	Description	Remark
D808	8-719-210-33	DIODE EC10DS2	
D911	8-719-988-61	DIODE 1SS355TE-17 (DR4/DR5/DR6/DR440)	
D912	8-719-210-33	DIODE EC10DS2 (DR4/DR5/DR6/DR440)	
D913	8-719-210-33	DIODE EC10DS2 (DR4/DR5/DR6/DR440)	
D931	8-719-210-33	DIODE EC10DS2	
D951	8-719-988-61	DIODE 1SS355TE-17	
		< FERRITE BEAD >	
FB412	1-414-772-11	FERRITE 0UH	
FB413	1-414-551-11	FERRITE 0UH	
FB415	1-414-772-11	FERRITE 0UH	
		< EMI FILTER >	
FL501	1-233-289-21	FILTER, EMI (SMD)	
FL502	1-233-289-21	FILTER, EMI (SMD)	
FL503	1-233-289-21	FILTER, EMI (SMD)	
		< IC >	
IC101	8-759-571-54	IC M62493FP	
IC181	8-759-009-06	IC MC14052BF	
IC191	8-759-571-53	IC BA7615N	
IC301	8-759-495-26	IC HA12215	
IC501	8-759-571-18	IC M30622MA-A01FP	
IC601	8-759-636-55	IC M5218AFP	
IC781	8-749-923-04	IC TOTX178	
IC801	8-759-635-63	IC M51943BSL	
IC901	8-759-604-86	IC M5F7807L	
IC911	8-759-231-53	IC TA7805S	
IC931	8-759-604-38	IC M5F78M10	
IC932	8-759-231-58	IC TA7812S (DR4/DR5/DR6/DR440/XB500)	
IC932	8-759-604-39	IC M5F78M12 (W300/W5000)	
IC933	8-759-604-86	IC M5F7807L	
IC951	8-759-604-90	IC M5F7907L	
		< JACK >	
J701	1-766-558-41	JACK, PIN 8P (VIDEO1 (AUDIO) IN, PHONO IN, MD IN/OUT)	
J702	1-770-336-11	JACK, PIN 2P (VIDEO1 (VIDEO) IN, VIDEO OUT)	
		< JUMPER RESISTOR >	
JR1	1-216-295-91	SHORT 0	
JR2	1-216-296-91	SHORT 0	
JR3	1-216-296-91	SHORT 0	
JR4	1-216-295-91	SHORT 0	
JR5	1-216-295-91	SHORT 0	
JR6	1-216-296-91	SHORT 0	
JR7	1-216-296-91	SHORT 0	
JR8	1-216-296-91	SHORT 0	
JR9	1-216-295-91	SHORT 0	
JR10	1-216-296-91	SHORT 0	
JR11	1-216-296-91	SHORT 0	
JR181	1-216-295-91	SHORT 0	
JR182	1-216-295-91	SHORT 0	
JR191	1-216-295-91	SHORT 0	
JR192	1-216-295-91	SHORT 0	
JR594	1-216-295-91	SHORT 0	
JR703	1-216-295-91	SHORT 0	

Ref. No.	Part No.	Description	Remark
JR901	1-216-295-91	SHORT 0	
JR907	1-216-295-91	SHORT 0 (DR4/DR5/DR6/DR440)	
JR908	1-216-295-91	SHORT 0 (W300/W5000/XB500)	
JR909	1-216-295-91	SHORT 0 (W300/W5000/XB500)	
JR910	1-216-296-91	SHORT 0 (W300/W5000/XB500)	
JR911	1-216-295-91	SHORT 0 (W300/W5000/XB500)	
		< DIODE >	
JW313	8-719-991-33	DIODE 1SS133T-77	
		< COIL >	
L781	1-412-032-11	INDUCTOR CHIP 100uH	
		< TRANSISTOR >	
Q111	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q112	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q113	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q115	8-729-029-86	TRANSISTOR DTC124ESA	
Q161	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q162	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q163	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q165	8-729-029-86	TRANSISTOR DTC124ESA	
Q331	8-729-118-00	TRANSISTOR 2SB1116-L	
Q332	8-729-029-66	TRANSISTOR DTC114ESA	
Q333	8-729-118-00	TRANSISTOR 2SB1116-L	
Q334	8-729-029-66	TRANSISTOR DTC114ESA	
Q335	8-729-029-66	TRANSISTOR DTC114ESA	
Q336	8-729-116-59	TRANSISTOR 2SB1068TP	
Q337	8-729-045-21	TRANSISTOR 2SD1513TP-LK	
Q338	8-729-029-21	TRANSISTOR DTA114ESA-TP	
Q339	8-729-029-66	TRANSISTOR DTC114ESA	
Q340	8-729-116-59	TRANSISTOR 2SB1068TP	
Q341	8-729-045-21	TRANSISTOR 2SD1513TP-LK	
Q342	8-729-029-21	TRANSISTOR DTA114ESA-TP	
Q343	8-729-029-66	TRANSISTOR DTC114ESA	
Q801	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q802	8-729-029-21	TRANSISTOR DTA114ESA-TP	
Q803	8-729-029-21	TRANSISTOR DTA114ESA-TP	
Q804	8-729-029-40	TRANSISTOR DTA124ESA	
Q901	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q902	8-729-029-40	TRANSISTOR DTA124ESA	
Q903	8-729-040-19	TRANSISTOR RT1N137L-TP	
Q904	8-729-029-86	TRANSISTOR DTC124ESA	
Q905	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q906	8-729-029-68	TRANSISTOR DTC114TSA	
Q911	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q912	8-729-029-86	TRANSISTOR DTC124ESA	
Q913	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q914	8-729-029-86	TRANSISTOR DTC124ESA	
Q931	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q932	8-729-029-86	TRANSISTOR DTC124ESA	
Q961	8-729-620-05	TRANSISTOR 2SC2603-EF	(DR4/DR5/DR6/DR440/W300/W5000)
Q962	8-729-118-00	TRANSISTOR 2SB1116-L	(DR4/DR5/DR6/DR440/W300/W5000)

MAIN

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R111	1-216-073-00	METAL CHIP	10K	5%	1/10W
R112	1-216-121-91	RES,CHIP	1M	5%	1/10W
R113	1-216-101-00	METAL CHIP	150K	5%	1/10W (DR5/DR6)
R113	1-216-103-00	METAL CHIP	180K	5%	1/10W (DR4/DR440/W300/W5000/XB500)
R114	1-216-043-91	RES,CHIP	560	5%	1/10W
R115	1-216-073-00	METAL CHIP	10K	5%	1/10W
R116	1-216-091-00	METAL CHIP	56K	5%	1/10W
R117	1-216-073-00	METAL CHIP	10K	5%	1/10W
R118	1-216-089-91	RES,CHIP	47K	5%	1/10W
R119	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R120	1-216-097-91	RES,CHIP	100K	5%	1/10W
R121	1-216-073-00	METAL CHIP	10K	5%	1/10W
R122	1-216-295-91	SHORT	0		
R123	1-216-101-00	METAL CHIP	150K	5%	1/10W (DR5/DR6)
R123	1-216-107-00	METAL CHIP	270K	5%	1/10W (DR4/DR440/W300/W5000/XB500)
R124	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R125	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R126	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R127	1-216-101-00	METAL CHIP	150K	5%	1/10W (DR5/DR6)
R127	1-216-111-00	METAL CHIP	390K	5%	1/10W (DR4/DR440/W300/W5000/XB500)
R129	1-216-121-91	RES,CHIP	1M	5%	1/10W
R131	1-216-025-91	RES,CHIP	100	5%	1/10W
R132	1-216-025-91	RES,CHIP	100	5%	1/10W
R133	1-216-025-91	RES,CHIP	100	5%	1/10W
R161	1-216-073-00	METAL CHIP	10K	5%	1/10W
R162	1-216-121-91	RES,CHIP	1M	5%	1/10W
R163	1-216-101-00	METAL CHIP	150K	5%	1/10W (DR5/DR6)
R163	1-216-103-00	METAL CHIP	180K	5%	1/10W (DR4/DR440/W300/W5000/XB500)
R164	1-216-043-91	RES,CHIP	560	5%	1/10W
R165	1-216-073-00	METAL CHIP	10K	5%	1/10W
R166	1-216-091-00	METAL CHIP	56K	5%	1/10W
R167	1-216-073-00	METAL CHIP	10K	5%	1/10W
R168	1-216-089-91	RES,CHIP	47K	5%	1/10W
R169	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R170	1-216-097-91	RES,CHIP	100K	5%	1/10W
R171	1-216-073-00	METAL CHIP	10K	5%	1/10W
R172	1-216-295-91	SHORT	0		
R173	1-216-101-00	METAL CHIP	150K	5%	1/10W (DR5/DR6)
R173	1-216-107-00	METAL CHIP	270K	5%	1/10W (DR4/DR440/W300/W5000/XB500)
R174	1-216-073-00	METAL CHIP	10K	5%	1/10W
R175	1-216-097-00	METAL CHIP	100K	5%	1/10W
R177	1-216-101-00	METAL CHIP	150K	5%	1/10W (DR5/DR6)
R177	1-216-111-00	METAL CHIP	390K	5%	1/10W (DR4/DR440/W300/W5000/XB500)
R178	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R179	1-216-121-91	RES,CHIP	1M	5%	1/10W

Ref. No.	Part No.	Description			Remark
R301	1-216-085-00	METAL CHIP	33K	5%	1/10W
R302	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R303	1-216-025-91	RES,CHIP	100	5%	1/10W
R304	1-216-025-91	RES,CHIP	100	5%	1/10W
R305	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R306	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R307	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R308	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R309	1-216-081-00	METAL CHIP	22K	5%	1/10W
R311	1-216-121-91	RES,CHIP	1M	5%	1/10W
R312	1-216-102-00	RES,CHIP	160K	5%	1/10W
R313	1-216-097-91	RES,CHIP	100K	5%	1/10W
R315	1-216-073-00	METAL CHIP	10K	5%	1/10W
R316	1-216-079-00	METAL CHIP	18K	5%	1/10W
R317	1-216-073-00	METAL CHIP	10K	5%	1/10W
R318	1-216-073-00	METAL CHIP	10K	5%	1/10W
R319	1-216-111-00	METAL CHIP	390K	5%	1/10W
R321	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R322	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R332	1-216-045-00	METAL CHIP	680	5%	1/10W
R333	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R334	1-216-045-00	METAL CHIP	680	5%	1/10W
R335	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R336	1-216-089-91	RES,CHIP	47K	5%	1/10W
R337	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R338	1-216-045-00	METAL CHIP	680	5%	1/10W
R339	1-216-089-91	RES,CHIP	47K	5%	1/10W
R340	1-216-089-91	RES,CHIP	47K	5%	1/10W
R341	1-216-045-00	METAL CHIP	680	5%	1/10W
R342	1-216-089-91	RES,CHIP	47K	5%	1/10W
R343	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R344	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R345	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R346	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R347	1-216-045-00	METAL CHIP	680	5%	1/10W
R348	1-216-045-00	METAL CHIP	680	5%	1/10W
R351	1-216-085-00	METAL CHIP	33K	5%	1/10W
R352	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R353	1-216-025-91	RES,CHIP	100	5%	1/10W
R354	1-216-025-91	RES,CHIP	100	5%	1/10W
R355	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R356	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R357	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R358	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R359	1-216-085-00	METAL CHIP	33K	5%	1/10W
R371	1-216-089-91	RES,CHIP	47K	5%	1/10W
R372	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R373	1-216-049-91	RES,CHIP	1K	5%	1/10W
R374	1-216-089-91	RES,CHIP	47K	5%	1/10W
R375	1-216-094-00	RES,CHIP	75K	5%	1/10W
R376	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R377	1-216-089-91	RES,CHIP	47K	5%	1/10W
R378	1-216-094-00	RES,CHIP	75K	5%	1/10W
R401	1-216-025-91	RES,CHIP	100	5%	1/10W
R402	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R413	1-216-295-91	SHORT	0		
R414	1-216-295-91	SHORT	0		

Ref. No.	Part No.	Description			Remark
R451	1-216-025-91	RES,CHIP	100	5%	1/10W
R452	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R501	1-216-025-91	RES,CHIP	100	5%	1/10W
R503	1-216-025-91	RES,CHIP	100	5%	1/10W
R505	1-216-025-91	RES,CHIP	100	5%	1/10W
R511	1-216-109-00	METAL CHIP	330K	5%	1/10W
R513	1-216-295-91	SHORT	0		
R517	1-216-073-00	METAL CHIP	10K	5%	1/10W
R518	1-216-025-91	RES,CHIP	100	5%	1/10W
R519	1-216-025-91	RES,CHIP	100	5%	1/10W
R520	1-216-025-91	RES,CHIP	100	5%	1/10W (XB500)
R521	1-216-025-91	RES,CHIP	100	5%	1/10W (XB500)
R522	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R526	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R527	1-216-025-91	RES,CHIP	100	5%	1/10W
R528	1-216-025-91	RES,CHIP	100	5%	1/10W
R529	1-216-025-91	RES,CHIP	100	5%	1/10W
R530	1-216-025-91	RES,CHIP	100	5%	1/10W
R532	1-216-025-91	RES,CHIP	100	5%	1/10W
R533	1-216-025-91	RES,CHIP	100	5%	1/10W
R535	1-216-025-91	RES,CHIP	100	5%	1/10W
R536	1-216-025-91	RES,CHIP	100	5%	1/10W
R537	1-216-025-91	RES,CHIP	100	5%	1/10W
R538	1-216-025-91	RES,CHIP	100	5%	1/10W
R540	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R541	1-216-073-00	METAL CHIP	10K	5%	1/10W
R542	1-216-025-91	RES,CHIP	100	5%	1/10W
R543	1-216-025-91	RES,CHIP	100	5%	1/10W
R545	1-216-025-91	RES,CHIP	100	5%	1/10W
R546	1-216-025-91	RES,CHIP	100	5%	1/10W
R547	1-216-025-91	RES,CHIP	100	5%	1/10W
R548	1-216-025-91	RES,CHIP	100	5%	1/10W
R549	1-216-041-00	METAL CHIP	470	5%	1/10W
R550	1-216-025-91	RES,CHIP	100	5%	1/10W
R551	1-216-025-91	RES,CHIP	100	5%	1/10W
R552	1-216-025-91	RES,CHIP	100	5%	1/10W
R553	1-216-025-91	RES,CHIP	100	5%	1/10W
R554	1-216-025-91	RES,CHIP	100	5%	1/10W
R555	1-216-025-91	RES,CHIP	100	5%	1/10W
R556	1-216-025-91	RES,CHIP	100	5%	1/10W
R557	1-216-025-91	RES,CHIP	100	5%	1/10W
R558	1-216-025-91	RES,CHIP	100	5%	1/10W
R559	1-216-025-91	RES,CHIP	100	5%	1/10W
R561	1-216-025-91	RES,CHIP	100	5%	1/10W
R563	1-216-025-91	RES,CHIP	100	5%	1/10W
R565	1-216-025-91	RES,CHIP	100	5%	1/10W
R567	1-216-073-00	METAL CHIP	10K	5%	1/10W
R568	1-216-025-91	RES,CHIP	100	5%	1/10W
R569	1-216-025-91	RES,CHIP	100	5%	1/10W
R570	1-216-089-91	RES,CHIP	47K	5%	1/10W
R572	1-216-025-91	RES,CHIP	100	5%	1/10W
R573	1-216-025-91	RES,CHIP	100	5%	1/10W
R574	1-216-025-91	RES,CHIP	100	5%	1/10W
R575	1-216-025-91	RES,CHIP	100	5%	1/10W
R576	1-216-025-91	RES,CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R577	1-216-025-91	RES,CHIP	100	5%	1/10W
R578	1-216-025-91	RES,CHIP	100	5%	1/10W
R579	1-216-025-91	RES,CHIP	100	5%	1/10W
R580	1-216-025-91	RES,CHIP	100	5%	1/10W
R581	1-216-025-91	RES,CHIP	100	5%	1/10W
R582	1-216-025-91	RES,CHIP	100	5%	1/10W
R583	1-216-025-91	RES,CHIP	100	5%	1/10W
R584	1-216-025-91	RES,CHIP	100	5%	1/10W
R585	1-216-025-91	RES,CHIP	100	5%	1/10W
R586	1-216-025-91	RES,CHIP	100	5%	1/10W
R587	1-216-025-91	RES,CHIP	100	5%	1/10W
R588	1-216-025-91	RES,CHIP	100	5%	1/10W
R589	1-216-025-91	RES,CHIP	100	5%	1/10W
R590	1-216-025-91	RES,CHIP	100	5%	1/10W
R591	1-216-025-91	RES,CHIP	100	5%	1/10W
R593	1-216-025-91	RES,CHIP	100	5%	1/10W
R594	1-216-053-00	METAL CHIP	1.5K	5%	1/10W (DR5)
R594	1-216-069-00	METAL CHIP	6.8K	5%	1/10W (DR6)
R594	1-216-295-91	SHORT	0	(DR4/DR440/W300/W5000/XB500)	
R595	1-216-089-91	RES,CHIP	47K	5%	1/10W
R596	1-216-069-00	METAL CHIP	6.8K	5%	1/10W (XB500)
R596	1-216-081-00	METAL CHIP	22K	5%	1/10W (DR4:E,TH,AR,MX/DR5:E,AR,MX/DR6:E,AR,MX/DR440)
R596	1-216-089-91	RES,CHIP	47K	5%	1/10W (DR4:EA,SP,AUS/DR5:SP/DR6:SP,MY)
R596	1-216-295-91	SHORT	0	(W300/W5000)	
R597	1-216-061-00	METAL CHIP	3.3K	5%	1/10W (SP,MY,EA,TH,AUS)
R597	1-216-089-91	RES,CHIP	47K	5%	1/10W (US,CND,AEP,UK,E,AR,MX)
R600	1-216-025-91	RES,CHIP	100	5%	1/10W
R601	1-216-049-91	RES,CHIP	1K	5%	1/10W
R602	1-216-049-91	RES,CHIP	1K	5%	1/10W
R603	1-216-089-91	RES,CHIP	47K	5%	1/10W
R604	1-216-047-91	RES,CHIP	820	5%	1/10W (W300/W5000/XB500)
R604	1-216-049-91	RES,CHIP	1K	5%	1/10W (DR4/DR5/DR6/DR440)
R605	1-216-115-00	METAL CHIP	560K	5%	1/10W
R606	1-216-089-91	RES,CHIP	47K	5%	1/10W
R607	1-216-049-91	RES,CHIP	1K	5%	1/10W
R608	1-216-097-91	RES,CHIP	100K	5%	1/10W
R609	1-216-033-00	METAL CHIP	220	5%	1/10W
R651	1-216-049-91	RES,CHIP	1K	5%	1/10W
R652	1-216-049-91	RES,CHIP	1K	5%	1/10W
R653	1-216-089-91	RES,CHIP	47K	5%	1/10W
R654	1-216-047-91	RES,CHIP	820	5%	1/10W (W300/W5000/XB500)
R654	1-216-049-91	RES,CHIP	1K	5%	1/10W (DR4/DR5/DR6/DR440)
R655	1-216-115-00	METAL CHIP	560K	5%	1/10W
R656	1-216-089-91	RES,CHIP	47K	5%	1/10W
R657	1-216-049-91	RES,CHIP	1K	5%	1/10W
R658	1-216-097-91	RES,CHIP	100K	5%	1/10W
R659	1-216-033-00	METAL CHIP	220	5%	1/10W

MAIN **PA**

Ref. No.	Part No.	Description			Remark
R701	1-216-049-91	RES,CHIP	1K	5%	1/10W
R702	1-216-097-91	RES,CHIP	100K	5%	1/10W
R703	1-216-049-91	RES,CHIP	1K	5%	1/10W
R704	1-216-097-91	RES,CHIP	100K	5%	1/10W
R705	1-216-049-91	RES,CHIP	1K	5%	1/10W
R706	1-216-097-91	RES,CHIP	100K	5%	1/10W
R721	1-216-022-00	METAL CHIP	75	5%	1/10W
R722	1-216-015-00	METAL CHIP	39	5%	1/10W
R724	1-216-073-00	METAL CHIP	10K	5%	1/10W
R751	1-216-049-91	RES,CHIP	1K	5%	1/10W
R752	1-216-097-91	RES,CHIP	100K	5%	1/10W
R753	1-216-049-91	RES,CHIP	1K	5%	1/10W
R754	1-216-097-91	RES,CHIP	100K	5%	1/10W
R755	1-216-049-91	RES,CHIP	1K	5%	1/10W
R756	1-216-097-91	RES,CHIP	100K	5%	1/10W
R801	1-216-049-91	RES,CHIP	1K	5%	1/10W
R802	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R803	1-216-025-91	RES,CHIP	100	5%	1/10W
R804	1-216-089-91	RES,CHIP	47K	5%	1/10W
R805	1-216-089-91	RES,CHIP	47K	5%	1/10W
R806	1-216-073-00	METAL CHIP	10K	5%	1/10W
R807	1-216-073-00	METAL CHIP	10K	5%	1/10W
R808	1-216-049-91	RES,CHIP	1K	5%	1/10W
R809	1-216-097-91	RES,CHIP	100K	5%	1/10W
R810	1-216-033-00	METAL CHIP	220	5%	1/10W
R811	1-216-097-91	RES,CHIP	100K	5%	1/10W
R901	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R902	1-216-081-00	METAL CHIP	22K	5%	1/10W
R903	1-216-049-91	RES,CHIP	1K	5%	1/10W
R961	1-216-065-91	RES,CHIP	4.7K	5%	1/10W (DR4/DR5/DR6/DR440/W300/W5000)
R962	1-216-097-91	RES,CHIP	100K	5%	1/10W (DR4/DR5/DR6/DR440/W300/W5000)
R963	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (DR4/DR5/DR6/DR440/W300/W5000)
R998	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R999	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
		< VARIABLE RESISTOR >			
RV301	1-238-600-11	RES, ADJ, CARBON 10K			
RV351	1-238-600-11	RES, ADJ, CARBON 10K			
		< VIBRATOR >			
X501	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
X502	1-781-107-21	VIBRATOR, SERAMIC (16MHz)			

****

*	A-4417-503-A	PA BOARD, COMPLETE (W300) **********
*	A-4417-512-A	PA BOARD, COMPLETE (XB500) **********
*	A-4417-537-A	PA BOARD, COMPLETE (DR4/DR440) **********
*	A-4417-565-A	PA BOARD, COMPLETE (DR6) **********

Ref. No.	Part No.	Description			Remark
*	A-4417-572-A	PA BOARD, COMPLETE (DR5) **********			
*	A-4419-648-A	PA BOARD, COMPLETE (W5000) **********			
		< CAPACITOR >			
C401	1-126-963-11	ELECT	4.7uF	20%	50V
C402	1-164-159-11	CERAMIC	0.1uF		50V (XB500)
C403	1-164-159-11	CERAMIC	0.1uF		50V (XB500)
C404	1-164-159-11	CERAMIC	0.1uF		50V (XB500)
C405	1-164-159-11	CERAMIC	0.1uF		50V (XB500)
C412	1-161-494-00	CERAMIC	0.022uF		25V
C413	1-161-494-00	CERAMIC	0.022uF		25V
C432	1-104-665-11	ELECT	100uF	20%	10V
C433	1-126-961-11	ELECT	2.2uF	20%	50V
C434	1-104-665-11	ELECT	100uF	20%	10V
C801	1-128-582-11	ELECT	10uF	20%	100V
C802	1-162-292-31	CERAMIC	680PF	10%	50V
C803	1-162-286-31	CERAMIC	220PF	10%	50V
C804	1-126-967-11	ELECT	47uF	20%	50V
C807	1-128-560-11	ELECT	22uF	20%	100V
C808	1-130-777-00	FILM	0.1uF	10%	100V
C809	1-130-777-00	FILM	0.1uF	10%	100V
C810	1-128-578-11	ELECT	1uF	20%	100V
C811	1-130-493-00	MYLAR	0.068uF	5%	50V
C812	1-130-493-00	MYLAR	0.068uF	5%	50V
C813	1-161-494-00	CERAMIC	0.022uF		25V
C814	1-162-294-31	CERAMIC	0.001uF	10%	50V
C815	1-128-562-11	ELECT	47uF	20%	100V
C830	1-107-714-11	ELECT	10uF	20%	50V
C831	1-126-964-11	ELECT	10uF	20%	50V
C832	1-126-967-11	ELECT	47uF	20%	50V
C841	1-127-752-11	ELECT	3300uF	20%	63V (W5000/XB500)
C841	1-127-811-11	ELECT	3300uF	20%	50V (DR4/DR5/DR6/DR440)
C842	1-127-814-11	ELECT	3300uF	20%	80V (DR4/DR440)
C842	1-127-815-11	ELECT	3300uF	20%	100V (DR5/DR6)
C844	1-130-777-00	FILM	0.1uF	10%	100V (DR4/DR5/DR6/DR440)
C845	1-126-943-11	ELECT	2200uF	20%	25V
C847	1-164-159-11	CERAMIC	0.1uF		50V
C848	1-164-159-11	CERAMIC	0.1uF		50V
C849	1-164-159-11	CERAMIC	0.1uF		50V
C850	1-107-721-11	ELECT	10uF	20%	100V
C851	1-128-582-11	ELECT	10uF	20%	100V
C852	1-162-292-31	CERAMIC	680PF	10%	50V
C853	1-162-286-31	CERAMIC	220PF	10%	50V
C854	1-126-967-11	ELECT	47uF	20%	50V
C857	1-128-560-11	ELECT	22uF	20%	100V
C858	1-164-159-11	CERAMIC	0.1uF		50V
C859	1-164-159-11	CERAMIC	0.1uF		50V
C861	1-130-493-00	MYLAR	0.068uF	5%	50V

Ref. No.	Part No.	Description	Remark
C862	1-130-493-00	MYLAR 0.068uF 5% 50V	
C863	1-126-961-11	ELECT 2.2uF 20% 50V	(W300/W5000/XB500)
C891	1-127-752-11	ELECT 3300uF 20% 63V	(W5000/XB500)
C891	1-127-811-11	ELECT 3300uF 20% 50V	(DR4/DR5/DR6/DR440)
C892	1-127-814-11	ELECT 3300uF 20% 80V	(DR4/DR440)
C892	1-127-815-11	ELECT 3300uF 20% 100V	(DR5/DR6)
C894	1-130-777-00	FILM 0.1uF 10% 100V	(DR4/DR5/DR6/DR440)
C895	1-107-721-11	ELECT 4.7uF 20% 100V	
C902	1-164-159-11	CERAMIC 0.1uF 50V	(W300/W5000/XB500)
C903	1-126-933-11	ELECT 100uF 20% 16V	(W300/W5000/XB500)
C904	1-126-964-11	ELECT 10uF 20% 50V	
C905	1-126-948-11	ELECT 100uF 20% 35V	
C906	1-126-768-11	ELECT 2200uF 20% 16V	(W300/W5000/XB500)
C908	1-164-159-11	CERAMIC 0.1uF 50V	(W300/W5000/XB500)
C909	1-164-159-11	CERAMIC 0.1uF 50V	(W300/W5000/XB500)
C962	1-126-968-11	ELECT 100uF 20% 50V	(W300/W5000/XB500)
		< CONNECTOR >	
CN803	1-778-981-11	CONNECTOR, BOARD TO BOARD 13P	
CN804	1-766-921-11	CONNECTOR, BOARD TO BOARD 10P	(DR4/DR5/DR6/DR440)
* CN804	1-770-747-11	CONNECTOR, BOARD TO BOARD 12P	(W300/W5000/XB500)
		< DIODE >	
D401	8-719-991-33	DIODE 1SS133T-77	
D402	8-719-991-33	DIODE 1SS133T-77	
D405	8-719-991-33	DIODE 1SS133T-77	
D406	8-719-991-33	DIODE 1SS133T-77	
D801	8-719-991-33	DIODE 1SS133T-77	
D802	8-719-110-06	DIODE RD18F-T7B2 (DR4/DR5/DR440)	
D803	8-719-991-33	DIODE 1SS133T-77	
D804	8-719-991-33	DIODE 1SS133T-77	
D805	8-719-991-33	DIODE 1SS133T-77	
D823	8-719-510-68	DIODE D5SBA20F01	(DR4:E,TH,EA,SP,AR,AUS/W300/W5000)
D831	8-719-510-68	DIODE D5SBA20F01 (DR4/DR5/DR6/DR440)	
D833	8-719-200-82	DIODE 11ES2	
D834	8-719-200-82	DIODE 11ES2	
D835	8-719-200-82	DIODE 11ES2	
D836	8-719-200-82	DIODE 11ES2	
D841	8-719-200-82	DIODE 11ES2	(DR4/DR6/DR440/W300/W5000/XB500)
D842	8-719-200-82	DIODE 11ES2	(DR4/DR6/DR440/W300/W5000/XB500)
D843	8-719-200-82	DIODE 11ES2	(DR4/DR6/DR440/W300/W5000/XB500)
D844	8-719-200-82	DIODE 11ES2	(DR4/DR6/DR440/W300/W5000/XB500)

Ref. No.	Part No.	Description	Remark
D851	8-719-991-33	DIODE 1SS133T-77	
D852	8-719-110-06	DIODE RD18F-T7B2 (DR4/DR5/DR440)	
D853	8-719-991-33	DIODE 1SS133T-77 (W300/W5000/XB500)	
D902	8-719-210-21	DIODE 11EQS04 (W300/W5000/XB500)	
D903	8-719-210-21	DIODE 11EQS04 (W300/W5000/XB500)	
D904	8-719-210-21	DIODE 11EQS04 (W300/W5000/XB500)	
D905	8-719-210-21	DIODE 11EQS04 (W300/W5000/XB500)	
D906	8-719-911-19	DIODE 1SS119-25 (W300/W5000/XB500)	
D907	8-719-200-82	DIODE 11ES2 (W300/W5000/XB500)	
D908	8-719-200-82	DIODE 11ES2 (W300/W5000/XB500)	
D909	8-719-200-82	DIODE 11ES2 (W300/W5000/XB500)	
D910	8-719-200-82	DIODE 11ES2 (W300/W5000/XB500)	
D911	8-719-934-25	DIODE HZS33-1L	
D912	8-719-109-89	DIODE RD5.6ESB2	
D913	8-719-911-19	DIODE 1SS119-25 (W300/W5000/XB500)	
		< FUSE >	
F841	8-719-200-82	DIODE 11ES2B (DR5)	
F842	8-719-200-82	DIODE 11ES2B (DR5)	
F843	8-719-200-82	DIODE 11ES2B (DR5)	
F844	8-719-200-82	DIODE 11ES2B (DR5)	
		< IC >	
IC801	8-749-015-36	IC STK411-240E (DR4/DR440/DR5)	
IC801	8-749-015-39	IC STK407-120E (W300/W5000/XB500)	
IC801	8-749-015-58	IC STK411-550E (DR6)	
IC901	8-759-450-47	IC BA05T (W300/W5000/XB500)	
		< COIL >	
L401	1-420-872-00	COIL, AIR-CORE (XB500)	
L402	1-420-872-00	COIL, AIR-CORE (XB500)	
		< TRANSISTOR >	
Q401	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q402	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q431	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q432	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q433	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q434	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q437	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q439	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q801	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q803	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q804	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q805	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q831	8-729-029-86	TRANSISTOR DTC124ESA	
Q832	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q833	8-729-029-40	TRANSISTOR DTA124ESA	
Q834	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q851	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q855	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q901	8-729-620-05	TRANSISTOR 2SC2603-EF	(W300/W5000/XB500)
Q902	8-729-040-19	TRANSISTOR RT1N137L-TP	(W300/W5000/XB500)
Q903	8-729-118-01	TRANSISTOR 2SB1116-K (W300/W5000/XB500)	
Q903	8-729-048-52	TRANSISTOR 2SA1932 (DR4/DR5/DR6/DR440)	

PA

Ref. No.	Part No.	Description				Remark
Q904	8-729-048-13	TRANSISTOR	2SC3616-KLM-T1			(W300/W5000/XB500)
Q904	8-729-620-05	TRANSISTOR	2SC2603-EF			(DR4/DR5/DR6/DR440)
Q905	8-729-048-13	TRANSISTOR	2SC3616-KLM-T1			(W300/W5000/XB500)
Q906	8-729-029-21	TRANSISTOR	DTA114ESA-TP			(W300/W5000/XB500)
Q907	8-729-029-21	TRANSISTOR	DTA114ESA-TP			(W300/W5000/XB500)
		< RESISTOR >				
⚠R401	1-215-893-11	METAL	1.5K	5%	2W	(W300/W5000/XB500)
⚠R401	1-215-455-00	METAL	27K	1%	1/4W	(DR4/DR5/DR6/DR440)
R406	1-249-437-11	CARBON	47K	5%	1/4W	
R407	1-249-437-11	CARBON	47K	5%	1/4W	
R410	1-249-389-11	CARBON	4.7	5%	1/4W F	(XB500)
R411	1-249-389-11	CARBON	4.7	5%	1/4W F	(XB500)
R412	1-249-389-11	CARBON	4.7	5%	1/4W F	(XB500)
R413	1-249-389-11	CARBON	4.7	5%	1/4W F	(XB500)
R414	1-260-076-11	CARBON	10	5%	1/2W	(XB500)
R415	1-260-076-11	CARBON	10	5%	1/2W	(XB500)
R429	1-249-437-11	CARBON	47K	5%	1/4W	
R431	1-249-438-11	CARBON	56K	5%	1/4W	
R432	1-249-437-11	CARBON	47K	5%	1/4W	
R434	1-247-863-91	CARBON	22K	5%	1/4W	
R435	1-249-425-11	CARBON	4.7K	5%	1/4W F	
R437	1-249-429-11	CARBON	10K	5%	1/4W	
R439	1-249-425-11	CARBON	4.7K	5%	1/4W F	
R440	1-249-863-91	CARBON	22K	5%	1/4W	
R441	1-249-435-11	CARBON	33K	5%	1/4W	
R446	1-249-429-11	CARBON	10K	5%	1/4W	
R447	1-249-437-11	CARBON	47K	5%	1/4W	
R801	1-249-417-11	CARBON	1K	5%	1/4W F	
R802	1-249-437-11	CARBON	47K	5%	1/4W	
R803	1-249-412-11	CARBON	390	5%	1/4W F	
R804	1-249-435-11	CARBON	33K	5%	1/4W	
⚠R805	1-216-436-00	METAL OXIDE	3.9K	5%	1W F	(DR4/DR5/DR6/DR440)
⚠R806	1-216-436-00	METAL OXIDE	3.9K	5%	1W F	(DR4/DR5/DR6/DR440)
⚠R807	1-212-881-11	FUSIBLE	100	5%	1/4W F	
⚠R808	1-220-893-11	METAL	0.22	10%	5W	
R809	1-260-076-11	CARBON	10	5%	1/2W	
R810	1-249-437-11	CARBON	47K	5%	1/4W	
R811	1-249-417-11	CARBON	1K	5%	1/4W F	
R812	1-249-431-11	CARBON	15K	5%	1/4W	
R813	1-249-441-11	CARBON	100K	5%	1/4W	
R814	1-249-421-11	CARBON	2.2K	5%	1/4W F	
R815	1-247-863-91	CARBON	22K	5%	1/4W	
R816	1-249-429-11	CARBON	10K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R817	1-249-421-11	CARBON	2.2K	5%	1/4W F	
R818	1-249-417-11	CARBON	1K	5%	1/4W F	
R819	1-249-439-11	CARBON	68K	5%	1/4W	
⚠R820	1-202-972-61	FUSIBLE	1	5%	1/4W F	
R821	1-249-435-11	CARBON	33K	5%	1/4W	(DR4/DR6/DR440/W300/W5000/XB500)
R822	1-247-863-91	CARBON	22K	5%	1/4W	
R823	1-247-863-91	CARBON	22K	5%	1/4W	
R824	1-249-418-11	CARBON	1.2K	5%	1/4W F	
R824	1-249-435-11	CARBON	33K	5%	1/4W	(DR5)
⚠R825	1-215-891-11	METAL OXIDE	680	5%	2W F	
R827	1-249-441-11	CARBON	100K	5%	1/4W	
R828	1-247-903-00	CARBON	1M	5%	1/4W	
R831	1-249-441-11	CARBON	100K	5%	1/4W	
R832	1-249-441-11	CARBON	100K	5%	1/4W	
R833	1-247-420-11	CARBON	1.8K	5%	1/4W	
R834	1-249-429-11	CARBON	10K	5%	1/4W	
R835	1-249-437-11	CARBON	47K	5%	1/4W	
R836	1-249-417-11	CARBON	1K	5%	1/4W F	
R837	1-249-435-11	CARBON	33K	5%	1/4W	(DR4/DR6/DR440/W300/W5000/XB500)
R838	1-249-435-11	CARBON	33K	5%	1/4W	(DR4/DR6/DR440/W300/W5000/XB500)
⚠R839	1-215-877-11	METAL OXIDE	22K	5%	1W F	(DR4/DR5/DR6/DR440)
R840	1-249-402-11	CARBON	56	5%	1/4W F	
⚠R842	1-217-637-00	FUSIBLE	1	5%	1/4W F	
R851	1-249-417-11	CARBON	1K	5%	1/4W F	
R852	1-249-437-11	CARBON	47K	5%	1/4W	
R853	1-249-412-11	CARBON	390	5%	1/4W F	
⚠R855	1-215-891-11	METAL OXIDE	680	5%	2W F	
⚠R857	1-212-881-11	FUSIBLE	100	5%	1/4W F	
⚠R858	1-220-893-11	METAL	0.22	10%	5W	
R859	1-260-076-11	CARBON	10	5%	1/2W	
R860	1-249-437-11	CARBON	47K	5%	1/4W	
R861	1-249-417-11	CARBON	1K	5%	1/4W F	
R862	1-249-431-11	CARBON	15K	5%	1/4W	
R863	1-249-441-11	CARBON	100K	5%	1/4W	
R864	1-247-847-31	CARBON	4.7K	5%	1/4W	(W300/W5000/XB500)
R865	1-247-863-31	CARBON	22K	5%	1/4W	(W300/W5000/XB500)
R868	1-249-417-11	CARBON	1K	5%	1/4W F	
R880	1-249-402-11	CARBON	56	5%	1/4W F	
⚠R889	1-215-877-11	METAL OXIDE	22K	5%	1W F	(DR4/DR5/DR6/DR440)
⚠R902	1-215-916-00	METAL	680	5%	3W F	
R903	1-249-429-11	CARBON	10K	5%	1/4W	
R904	1-249-417-11	CARBON	1K	5%	1/4W F	
R905	1-249-429-11	CARBON	10K	5%	1/4W	
R906	1-247-807-31	CARBON	100	5%	1/4W	
R907	1-247-807-31	CARBON	100	5%	1/4W	
R908	1-247-807-31	CARBON	100	5%	1/4W	(W300/W5000/XB500)
R909	1-247-791-31	CARBON	22	5%	1/4W F	(DR4/DR5/DR6/DR440)
R911	1-249-429-11	CARBON	10K	5%	1/4W	(W300/W5000/XB500)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
R912	1-249-429-11	CARBON	10K	5%	1/4W
R951	1-219-122-91	FUSIBLE	0.33	5%	1/4W F
		(DR4/DR5/DR6/DR440/W300:US/W5000/XB500)			
R952	1-219-122-91	FUSIBLE	0.33	5%	1/4W F
		(DR4/DR5/DR6/DR440/W300:US/W5000/XB500)			
R953	1-219-119-81	FUSIBLE	0.1	5%	1/4W F
		< RELAY >			
RY401	1-515-920-11	RELAY (24V)			
		< THERMISTOR >			
TH831	1-807-796-11	THERMISTOR			
		< TERMINAL >			
TM401	1-537-801-11	TERMINAL BOARD			
TM402	1-537-240-11	TERMINAL BOARD (CHECKER PIN) (REAR SPEAKER L/R)(W300)			
		< SWITCH >			
VS901	1-771-291-11	SWITCH, POWER			
		(DR4:E,TH,EA,SP,AR/DR5:E,SP,AR/DR6:E,SP,MY,AR)			
VS901	1-771-291-31	SWITCH, POWER			
		(DR4:E,TH,EA,SP,AR/DR5:E,SP,AR/DR6:E,SP,MY,AR)			
**********					
*	A-4417-499-A	PANEL FL BOARD, COMPLETE (W300/W5000)			
		**********			
*	A-4417-510-A	PANEL FL BOARD, COMPLETE (XB500)			
		**********			
*	A-4417-524-A	PANEL FL BOARD, COMPLETE (DR4/DR440)			
		**********			
*	A-4417-570-A	PANEL FL BOARD, COMPLETE (DR5/DR6)			
		**********			
*	4-214-750-01	HOLDER (915), FL TUBE (DR4/DR440/W300/W5000/XB500)			
*	4-949-935-81	CUSHION (FL)			
		< CAPACITOR >			
C601	1-104-664-11	ELECT	47uF	20%	10V
C602	1-162-306-11	CERAMIC	0.01uF	20%	16V
C604	1-126-960-11	ELECT	1uF	20%	50V
C606	1-126-960-11	ELECT	1uF	20%	50V
C608	1-104-665-11	ELECT	100uF	20%	10V
C609	1-162-294-31	CERAMIC	0.001uF	10%	50V
C613	1-104-664-11	ELECT	47uF	20%	16V
C616	1-162-294-31	CERAMIC	0.001uF	10%	50V
C617	1-162-306-11	CERAMIC	0.01uF	20%	16V
C621	1-126-964-11	ELECT	10uF	20%	50V
C622	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C623	1-126-964-11	ELECT	10uF	20%	50V
C624	1-104-664-11	ELECT	47uF	20%	16V
C625	1-126-963-11	ELECT	4.7uF	20%	50V
C626	1-126-964-11	ELECT	10uF	20%	50V
C641	1-162-286-21	CERAMIC	220PF	10%	50V
C642	1-162-286-21	CERAMIC	220PF	10%	50V
C643	1-162-286-21	CERAMIC	220PF	10%	50V
C644	1-162-286-21	CERAMIC	220PF	10%	50V
C645	1-162-286-21	CERAMIC	220PF	10%	50V
C646	1-162-286-21	CERAMIC	220PF	10%	50V
C647	1-162-286-21	CERAMIC	220PF	10%	50V
C648	1-162-286-21	CERAMIC	220PF	10%	50V
C649	1-162-286-21	CERAMIC	220PF	10%	50V
C650	1-162-286-21	CERAMIC	220PF	10%	50V
C651	1-162-286-21	CERAMIC	220PF	10%	50V
C652	1-162-286-21	CERAMIC	220PF	10%	50V
C653	1-162-286-21	CERAMIC	220PF	10%	50V
C654	1-162-286-21	CERAMIC	220PF	10%	50V
C655	1-162-286-21	CERAMIC	220PF	10%	50V
C656	1-162-286-21	CERAMIC	220PF	10%	50V
		< CONNECTOR >			
CN601	1-784-776-11	CONNECTOR, FFC 15P			
CN602	1-784-737-11	CONNECTOR, FFC 15P			
		< DIODE >			
D601	8-719-071-44	DIODE SELS5223C-TP15 (STAND-BY)			
D602	8-719-058-04	DIODE SEL5223S-TP15 (DAILY)			
D603	8-719-058-04	DIODE SEL5223S-TP15 (REC)			
D604	8-719-058-04	DIODE SEL5223S-TP15 (SYNC EQ)			
D605	8-719-058-04	DIODE SEL5223S-TP15 (SYNC BASS)			
D606	8-719-058-03	DIODE SEL5423E-TP15 (TUNER BAND)			
D607	8-719-058-04	DIODE SEL5223S-TP15 (ENT/NEX)			
D608	8-719-050-84	DIODE RB441Q-40T-77			
		< FLUORESCENT INDICATOR >			
FL601	1-517-839-11	INDICATOR TUBE, FLUORESCENT (DR5/DR6)			
FL601	1-517-840-11	INDICATOR TUBE, FLUORESCENT (DR4/DR440/W300/W5000/XB500)			
		< IC >			
IC601	8-759-571-93	IC TMP88CS76F-6000			
IC602	8-759-459-86	IC NJL64H400A			
IC603	8-759-083-77	IC BA3830F			
IC604	8-759-567-59	IC NJU3716L			
		< COIL >			
L601	1-410-517-11	INDUCTOR	47uH		
L602	1-410-517-11	INDUCTOR	47uH		
L603	1-410-517-11	INDUCTOR	47uH		
L604	1-410-509-11	INDUCTOR	10uH		
		< LINE FILTER >			
LF601	1-424-228-11	FILTER, NOISE			
		< TRANSISTOR >			
Q601	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q602	8-729-118-00	TRANSISTOR 2SB1116-L			
Q603	8-729-118-00	TRANSISTOR 2SB1116-L			
Q605	8-729-029-23	TRANSISTOR DTA114TSA-TP			
Q606	8-729-029-23	TRANSISTOR DTA114TSA-TP			

PANEL FL

Ref. No.	Part No.	Description			Remark
Q607	8-729-029-23	TRANSISTOR	DTA114TSA-TP		
Q608	8-729-047-58	TRANSISTOR	DTC114TLTL2		
Q609	8-729-047-58	TRANSISTOR	DTC114TLTL2		
Q610	8-729-047-58	TRANSISTOR	DTC114TLTL2		
		< RESISTOR >			
R601	1-247-893-11	CARBON	390K	5%	1/4W
R602	1-247-893-11	CARBON	390K	5%	1/4W
R603	1-249-441-11	CARBON	100K	5%	1/4W
R604	1-249-441-11	CARBON	100K	5%	1/4W
R605	1-247-807-31	CARBON	100	5%	1/4W
R608	1-249-435-11	CARBON	33K	5%	1/4W
R609	1-247-895-91	CARBON	470K	5%	1/4W
R610	1-249-401-11	CARBON	47	5%	1/4W F
R611	1-249-429-11	CARBON	10K	5%	1/4W
R612	1-247-807-31	CARBON	100	5%	1/4W
R613	1-247-807-31	CARBON	100	5%	1/4W
R614	1-247-807-31	CARBON	100	5%	1/4W
R615	1-249-429-11	CARBON	10K	5%	1/4W
R616	1-249-429-11	CARBON	10K	5%	1/4W
R617	1-249-429-11	CARBON	10K	5%	1/4W
R618	1-249-429-11	CARBON	10K	5%	1/4W
R619	1-249-429-11	CARBON	10K	5%	1/4W
R620	1-249-429-11	CARBON	10K	5%	1/4W
R621	1-249-429-11	CARBON	10K	5%	1/4W
R622	1-249-429-11	CARBON	10K	5%	1/4W
R623	1-247-903-00	CARBON	1M	5%	1/4W
R624	1-247-807-31	CARBON	100	5%	1/4W
R625	1-247-807-31	CARBON	100	5%	1/4W
R626	1-249-429-11	CARBON	10K	5%	1/4W
R627	1-247-807-31	CARBON	100	5%	1/4W
R628	1-249-429-11	CARBON	10K	5%	1/4W
R629	1-247-807-31	CARBON	100	5%	1/4W
R630	1-249-429-11	CARBON	10K	5%	1/4W
R631	1-249-410-11	CARBON	270	5%	1/4W F
R632	1-249-411-11	CARBON	330	5%	1/4W
R633	1-249-413-11	CARBON	470	5%	1/4W F
R634	1-249-414-11	CARBON	560	5%	1/4W F
R635	1-249-415-11	CARBON	680	5%	1/4W F
R636	1-249-417-11	CARBON	1K	5%	1/4W F
R637	1-249-418-11	CARBON	1.2K	5%	1/4W F
R638	1-249-420-11	CARBON	1.8K	5%	1/4W F
R639	1-249-422-11	CARBON	2.7K	5%	1/4W F
R640	1-247-843-11	CARBON	3.3K	5%	1/4W
R641	1-249-425-11	CARBON	4.7K	5%	1/4W F
R642	1-249-427-11	CARBON	6.8K	5%	1/4W F
R643	1-249-429-11	CARBON	10K	5%	1/4W
R644	1-249-431-11	CARBON	15K	5%	1/4W
R645	1-249-434-11	CARBON	27K	5%	1/4W
R647	1-249-410-11	CARBON	270	5%	1/4W F
R648	1-249-411-11	CARBON	330	5%	1/4W
R649	1-249-413-11	CARBON	470	5%	1/4W F
R650	1-249-414-11	CARBON	560	5%	1/4W F
R651	1-249-415-11	CARBON	680	5%	1/4W F
R652	1-249-437-11	CARBON	47K	5%	1/4W
R653	1-249-417-11	CARBON	1K	5%	1/4W F
R654	1-249-437-11	CARBON	47K	5%	1/4W
R655	1-249-417-11	CARBON	1K	5%	1/4W F
R656	1-249-438-11	CARBON	56K	5%	1/4W
R659	1-249-411-11	CARBON	330	5%	1/4W
R660	1-249-411-11	CARBON	330	5%	1/4W
R661	1-249-412-11	CARBON	390	5%	1/4W F
R662	1-249-407-11	CARBON	150	5%	1/4W F
R663	1-247-804-11	CARBON	75	5%	1/4W
R664	1-249-407-11	CARBON	150	5%	1/4W F
R665	1-249-441-11	CARBON	100K	5%	1/4W
R666	1-249-441-11	CARBON	100K	5%	1/4W
R667	1-249-441-11	CARBON	100K	5%	1/4W
R668	1-249-429-11	CARBON	10K	5%	1/4W
R669	1-249-393-11	CARBON	10	5%	1/4W F
R670	1-249-393-11	CARBON	10	5%	1/4W F
R671	1-249-393-11	CARBON	10	5%	1/4W F
R672	1-249-393-11	CARBON	10	5%	1/4W F
R673	1-249-393-11	CARBON	10	5%	1/4W F
R674	1-249-393-11	CARBON	10	5%	1/4W F
R675	1-249-393-11	CARBON	10	5%	1/4W F
R676	1-249-393-11	CARBON	10	5%	1/4W F
R677	1-249-393-11	CARBON	10	5%	1/4W F
R678	1-249-393-11	CARBON	10	5%	1/4W F
R679	1-249-393-11	CARBON	10	5%	1/4W F
R680	1-249-420-11	CARBON	1.8K	5%	1/4W F
R681	1-249-440-11	CARBON	82K	5%	1/4W
R682	1-249-420-11	CARBON	1.8K	5%	1/4W F
R683	1-249-437-11	CARBON	47K	5%	1/4W
R684	1-249-440-11	CARBON	82K	5%	1/4W
R685	1-249-429-11	CARBON	10K	5%	1/4W F
		< SWITCH >			
S601	1-554-303-21	SWITCH, TACTILE (POWER SAVE/DEMO (STANDBY))			
S602	1-554-303-21	SWITCH, TACTILE (ECO)			
S603	1-554-303-21	SWITCH, TACTILE (DISPLAY)			
S604	1-554-303-21	SWITCH, TACTILE (SPECTRUM ANALYZER)			
S605	1-554-303-21	SWITCH, TACTILE (PTY)(XB500)			
S606	1-554-303-21	SWITCH, TACTILE (TUNING MODE)			
S607	1-554-303-21	SWITCH, TACTILE (STERE/MONO)			
S608	1-554-303-21	SWITCH, TACTILE (ENTER/NEXT)			
S609	1-554-303-21	SWITCH, TACTILE (TUNER/BAND)			
S610	1-554-303-21	SWITCH, TACTILE (TUNING +)			
S611	1-554-303-21	SWITCH, TACTILE (TUNING -)			
S612	1-554-303-21	SWITCH, TACTILE (FUNCTION)			
S613	1-554-303-21	SWITCH, TACTILE (TUNING MEMORY)			
S614	1-554-303-21	SWITCH, TACTILE (SYNC EQ)			
S615	1-554-303-21	SWITCH, TACTILE (SYNC BASS)			
S617	1-554-303-21	SWITCH, TACTILE (DAILY)			
S618	1-554-303-21	SWITCH, TACTILE (REC)			
S619	1-554-303-21	SWITCH, TACTILE (SLEEP)			
S620	1-554-303-21	SWITCH, TACTILE (◴/CLOCK SET)			
		< VIBRATOR >			
X601	1-781-312-11	VIBRATOR, CERAMIC (12.5MHz)			

****

Ref. No.	Part No.	Description				Remark
*	A-4417-536-A	PANEL-VR BOARD, COMPLETE				
		**********				
		< CAPACITOR >				
C610	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C611	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C612	1-164-159-21	CERAMIC	0.1uF		50V	
		< CONNECTOR >				
CN701	1-784-776-11	CONNECTOR, FFC 15P				
		< DIODE >				
D611	8-719-058-04	DIODE SEL5223S-TP15 (GROOVE)				
D612	8-719-058-04	DIODE SEL5223S-TP15 (SUPER WOOFER)				
D616	8-719-058-04	DIODE SEL5223S-TP15 (ENTER)				
D618	8-719-058-04	DIODE SEL5223S-TP15 (EFFECT)				
D619	8-719-060-26	DIODE SLR-325YCT31 (MENU 2)				
D620	8-719-060-26	DIODE SLR-325YCT31 (MENU 1)				
D621	8-719-060-26	DIODE SLR-325YCT31 (P.FILE)				
D623	8-719-060-26	DIODE SLR-325YCT31 (FILE 5)				
D624	8-719-060-26	DIODE SLR-325YCT31 (FILE 4)				
D625	8-719-060-26	DIODE SLR-325YCT31 (FILE 3)				
D626	8-719-060-26	DIODE SLR-325YCT31 (FILE 2)				
D627	8-719-060-26	DIODE SLR-325YCT31 (FILE 1)				
		< RESISTOR >				
R761	1-249-410-11	CARBON	270	5%	1/4W	F
R762	1-249-411-11	CARBON	330	5%	1/4W	
R763	1-249-413-11	CARBON	470	5%	1/4W	F
R764	1-249-414-11	CARBON	560	5%	1/4W	F
R765	1-249-415-11	CARBON	680	5%	1/4W	F
R766	1-249-417-11	CARBON	1K	5%	1/4W	F
R767	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R768	1-249-420-11	CARBON	1.8K	5%	1/4W	F
R769	1-249-422-11	CARBON	2.7K	5%	1/4W	F
R770	1-247-843-11	CARBON	3.3K	5%	1/4W	
R771	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R772	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R773	1-249-429-11	CARBON	10K	5%	1/4W	
R774	1-249-431-11	CARBON	15K	5%	1/4W	
R775	1-249-434-11	CARBON	27K	5%	1/4W	
R776	1-249-438-11	CARBON	56K	5%	1/4W	
R777	1-247-818-91	CARBON	300	5%	1/4W	
R778	1-249-407-11	CARBON	150	5%	1/4W	F
R782	1-249-407-11	CARBON	150	5%	1/4W	F
R784	1-249-407-11	CARBON	150	5%	1/4W	F
R785	1-249-407-11	CARBON	150	5%	1/4W	F
R786	1-249-407-11	CARBON	150	5%	1/4W	F
R787	1-249-407-11	CARBON	150	5%	1/4W	F
R789	1-249-407-11	CARBON	150	5%	1/4W	F
R790	1-249-407-11	CARBON	150	5%	1/4W	F
R791	1-249-407-11	CARBON	150	5%	1/4W	F
R792	1-249-407-11	CARBON	150	5%	1/4W	F
R793	1-249-407-11	CARBON	150	5%	1/4W	F
R794	1-249-417-11	CARBON	1K	5%	1/4W	F
R795	1-249-417-11	CARBON	1K	5%	1/4W	F

Ref. No.	Part No.	Description				Remark
		< SWITCH >				
S625	1-771-215-11	SWITCH, TACTILE (GEQ ⇦ ⇧ ⇩ ⇨)				
S626	1-554-303-21	SWITCH, TACTILE (GROOVE)				
S627	1-554-303-21	SWITCH, TACTILE (SUPER WOOFER)				
S628	1-554-303-21	SWITCH, TACTILE (MODE)				
S632	1-554-303-21	SWITCH, TACTILE (KARAOKE PON/MPX)				
S633	1-554-303-21	SWITCH, TACTILE (ENTER)				
S634	1-554-303-21	SWITCH, TACTILE (GEQ CONTROL)				
S635	1-554-303-21	SWITCH, TACTILE (SURROUND)				
S636	1-554-303-21	SWITCH, TACTILE (EFFECT)				
S637	1-554-303-21	SWITCH, TACTILE (P.FILE MEMORY)				
S701	1-473-392-11	ENCODER, ROTARY (VOLUME)				
**********						
	A-2007-800-A	LEAF SW BOARD, COMPLETE				
		**********				
		< CAPACITOR >				
C1001	1-107-716-11	ELECT	33uF	20%	10V	
		< CONNECTOR >				
CN1001	1-784-459-11	CONNECTOR, FFC/FPC 17P				
		< DIODE >				
D1001	8-719-991-33	DIODE 1SS133T-77				
D1002	8-719-991-33	DIODE 1SS133T-77				
		< CABLE HOLDER >				
* DM1001	1-784-581-11	HOLDER, CABLE (2.5MM PITCH) 4P				
		< IC >				
IC1001	8-749-014-38	IC PHOTO INTERRUPTER SG-264				
IC1002	8-749-014-38	IC PHOTO INTERRUPTER SG-264				
		< TRANSISTOR >				
Q1001	8-729-029-56	TRANSISTOR DTA144ESA				
		< RESISTOR >				
R907	1-249-441-11	CARBON	100K	5%	1/4W	
R1001	1-247-815-91	CARBON	220	5%	1/4W	
R1002	1-247-815-91	CARBON	220	5%	1/4W	
R1003	1-249-414-11	CARBON	560	5%	1/4W	F
R1004	1-247-834-11	CARBON	1.3K	5%	1/4W	
R1005	1-247-818-91	CARBON	300	5%	1/4W	
R1006	1-247-864-11	CARBON	24K	5%	1/4W	
R1007	1-247-856-00	CARBON	11K	5%	1/4W	
R1008	1-249-417-11	CARBON	1K	5%	1/4W	F
		< VARIABLE RESISTOR >				
RV1001	1-241-785-11	RES, ADJ, CARBON 10K (TAPE SPEED (NORMAL))				
RV1002	1-241-785-11	RES, ADJ, CARBON 10K (TAPE SPEED (HIGH))				
		< SWITCH >				
S1001	1-570-953-11	SWITCH, PUSH (1 KEY)				

Ref. No.	Part No.	Description				Remark
S1002	1-570-953-11	SWITCH, PUSH (1 KEY)				
S1003	1-771-333-11	SWITCH, LEAF (A PLAY)				
S1004	1-771-205-11	SWITCH, LEAF (B PLAY)				
S1005	1-771-205-11	SWITCH, LEAF (A 120/70)				
S1006	1-771-333-11	SWITCH, LEAF (REC A)				
S1008	1-771-205-11	SWITCH, LEAF (REC B)				
S1009	1-771-205-11	SWITCH, LEAF (B 120/70)				
**********						
*	1-672-432-11	SUB TRANS BOARD (W300/W5000/XB500)				
		**********				
		< CAPACITOR >				
⚠C901	1-113-925-11	CERAMIC	0.01uF	20%	250V	
		< CONNECTOR >				
* CN901	1-580-230-11	PIN CONNECTOR (PC BOARD) 2P (W300/W5000/XB500)				
CN902	1-564-321-00	PIN, CONNECTOR 2P (W300/W5000/XB500)				
		< DIODE >				
D901	8-719-991-33	DIODE 1SS133T-77 (W300/W5000/XB500)				
		< RELAY >				
⚠RY901	1-755-276-11	RELAY, POWER (W300/W5000/XB500)				
⚠RY901	1-755-276-21	RELAY, POWER (XB500)				
⚠RY901	1-755-276-31	RELAY, POWER (XB500)				
		< TRANSFORMER >				
T901	1-433-615-11	TRANSFORMER, POWER (W300/W5000)				
T901	1-433-616-11	TRANSFORMER, POWER (XB500)				
**********						
*	1-659-058-13	TABLE SENSOR BOARD				
		**********				
		< IC >				
IC202	8-749-924-18	IC PHOTO INTERRUPTER RPI-1391				
		< RESISTOR >				
R207	1-249-416-11	CARBON	820	5%	1/4W	F
**********						
*	1-672-193-11	TC-A BOARD				
		**********				
		< DIODE >				
D631	8-719-058-03	DIODE SEL5423E-TP15 (▷)(A DECK)				
D632	8-719-058-03	DIODE SEL5423E-TP15 (◁)(A DECK)				
		< RESISTOR >				
R701	1-249-417-11	CARBON	1K	5%	1/4W	F
R702	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R703	1-249-420-11	CARBON	1.8K	5%	1/4W	F
R704	1-249-422-11	CARBON	2.7K	5%	1/4W	F
R705	1-247-843-11	CARBON	3.3K	5%	1/4W	
R706	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R707	1-247-804-11	CARBON	75	5%	1/4W	
R708	1-247-804-11	CARBON	75	5%	1/4W	
		< SWITCH >				
S641	1-554-303-21	SWITCH, TACTILE (▷)				
S642	1-554-303-21	SWITCH, TACTILE (◁)				
S643	1-554-303-21	SWITCH, TACTILE (□)				
S644	1-554-303-21	SWITCH, TACTILE (◁◁)				
S645	1-554-303-21	SWITCH, TACTILE (▷▷)				
S646	1-554-303-21	SWITCH, TACTILE (DOLBY ON)				
S647	1-554-303-21	SWITCH, TACTILE (DIRECTION)				
**********						
*	1-672-194-11	TC-B BOARD				
		**********				
		< DIODE >				
D635	8-719-058-03	DIODE SEL5423E-TP15 (◁)(B DECK)				
D636	8-719-058-03	DIODE SEL5423E-TP15 (▷)(B DECK)				
D637	8-719-057-97	DIODE SEL5923A-TP15 (❚❚)				
D638	8-719-058-04	DIODE SEL5223S-TP15 (● REC)				
		< RESISTOR >				
R711	1-249-410-11	CARBON	270	5%	1/4W	F
R712	1-249-411-11	CARBON	330	5%	1/4W	
R713	1-249-413-11	CARBON	470	5%	1/4W	F
R714	1-249-414-11	CARBON	560	5%	1/4W	F
R715	1-249-415-11	CARBON	680	5%	1/4W	F
R716	1-249-417-11	CARBON	1K	5%	1/4W	F
R717	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R718	1-249-420-11	CARBON	1.8K	5%	1/4W	F
R719	1-249-422-11	CARBON	2.7K	5%	1/4W	F
R720	1-247-804-11	CARBON	75	5%	1/4W	
R721	1-247-804-11	CARBON	75	5%	1/4W	
R722	1-247-807-31	CARBON	100	5%	1/4W	
R723	1-249-407-11	CARBON	150	5%	1/4W	F
		< SWITCH >				
S651	1-554-303-21	SWITCH, TACTILE (▷)				
S652	1-554-303-21	SWITCH, TACTILE (◁)				
S653	1-554-303-21	SWITCH, TACTILE (□)				
S654	1-554-303-21	SWITCH, TACTILE (◁◁)				
S655	1-554-303-21	SWITCH, TACTILE (▷▷)				
S656	1-554-303-21	SWITCH, TACTILE (❚❚)				
S657	1-554-303-21	SWITCH, TACTILE (● REC)				
S658	1-554-303-21	SWITCH, TACTILE (HI-SPEED DUB)				
S659	1-554-303-21	SWITCH, TACTILE (CD SYNCHRO)				
**********						
*	1-672-431-11	TRANS BOARD (DR4/DR5/DR6/DR440)				
		**********				
*	1-672-430-11	TRANS BOARD (W300/W5000/XB500)				
		**********				
		< CAPACITOR >				
C843	1-130-777-00	FILM	0.1uF	10%	100V	

Ref. No.	Part No.	Description			Remark
C893	1-130-777-00	FILM	0.1uF	10%	100V
C961	1-162-306-11	CERAMIC	0.01uF	20%	16V
C963	1-162-306-11	CERAMIC	0.01uF	20%	16V
		< CONNECTOR >			
* CN901	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P (DR4:E,TH,EA,SP,AR/DR5:E,SP,AR/DR6:E,SP,MY,AR)			
* CN952	1-564-526-11	PLUG, CONNECTOR 11P (W300/W5000/XB500)			
* CN952	1-564-528-11	PLUG, CONNECTOR 13P (DR4/DR5/DR6/DR440)			
		< DIODE >			
D832	8-719-510-68	DIODE D5SBA20F01			
		< FUSE >			
⚠F951	1-533-310-11	FUSE, GLASS TUBE6.3A 125V			
⚠F951	1-532-505-31	FUSE (T5AL/250V)(DR4/DR440)			
⚠F951	1-533-949-31	FUSE, CYLINDRICAL (TIME LUG)			
⚠F961	1-532-506-31	FUSE (T6.3AL/250V) (DR4/DR5/DR6/DR440/XB500)			
⚠F962	1-532-506-31	FUSE (T6.3AL/250V) (DR4/DR5/DR6/DR440/XB500)			
⚠F963	1-532-506-31	FUSE (T6.3AL/250V) (DR4/DR5/DR6/DR440/XB500)			
⚠F964	1-532-506-31	FUSE (T6.3AL/250V) (DR4/DR5/DR6/DR440/XB500)			
		< FUSE HOLDER >			
FH951	1-533-233-21	HOLDER, FUSE (DR4:E,TH,EA,SP,AR,MX/DR5/DR6/DR440/W300/W5000)			
FH952	1-533-233-21	HOLDER, FUSE (DR4:E,TH,EA,SP,AR,MX/DR5/DR6/DR440/W300/W5000)			
FH961	1-533-233-21	HOLDER, FUSE (DR4/DR5/DR6/DR440/XB500)			
FH962	1-533-233-21	HOLDER, FUSE (DR4/DR5/DR6/DR440/XB500)			
FH963	1-533-233-21	HOLDER, FUSE (DR4/DR5/DR6/DR440/XB500)			
FH964	1-533-233-21	HOLDER, FUSE (DR4/DR5/DR6/DR440/XB500)			
FH965	1-533-233-21	HOLDER, FUSE (DR4/DR5/DR6/DR440/XB500)			
FH966	1-533-233-21	HOLDER, FUSE (DR4/DR5/DR6/DR440/XB500)			
FH967	1-533-233-21	HOLDER, FUSE (DR4/DR5/DR6/DR440/XB500)			
FH968	1-533-233-21	HOLDER, FUSE (DR4/DR5/DR6/DR440/XB500)			
		< RESISTOR >			
R951	1-219-119-81	FUSIBLE	0.1	5%	1/4W F (W300:CND)
R952	1-219-119-81	FUSIBLE	0.1	5%	1/4W F (W300:CND)
R961	1-202-725-00	SOLID	3.3M	10%	1/2W (W300:CND)
R961	1-219-237-11	SOLID	3.3M	20%	1/2W (W300:US/W5000)
		< TRANSFORMER >			
⚠T951	1-433-602-11	TRANSFORMER, POWER (W300/W5000)			
⚠T951	1-433-603-11	TRANSFORMER, POWER (XB500)			
⚠T951	1-433-604-11	TRANSFORMER, POWER (DR4/DR440)			
⚠T951	1-433-606-11	TRANSFORMER, POWER (DR5)			
⚠T951	1-433-611-11	TRANSFORMER, POWER (DR6)			

****

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
1	1-769-977-11	WIRE (FLAT TYPE) (13 CORE)	
1	1-773-009-11	WIRE (FLAT TYPE) (15 CORE)(XB500)	
5	1-233-545-11	TUNER (UNIT)(EA,SP,MY,AR,MX,AUS)	
5	1-693-443-11	TUNER (UNIT)(AEP,UK)	
5	1-693-445-11	TUNER (UNIT)(US,CND)	
5	1-693-453-11	TUNER (UNIT)(E,TH)	
61	1-773-002-11	WIRE (FLAT TYPE) (15 CORE) (80 mm)	
62	1-773-034-11	WIRE (FLAT TYPE) (15 CORE) (420 mm)	
156	1-790-287-11	WIRE (FLAT TYPE) (19 CORE)	
160	1-773-006-11	WIRE (FLAT TYPE) (15 CORE)	
161	1-773-056-11	WIRE (FLAT TYPE) (17 CORE)	
507	1-452-925-21	MAGNET ASSY	
⚠601	8-820-020-02	OPTICAL PICK-UP KSS-213D/Q-NP	
602	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
⚠CNP901	1-558-943-41	CORD, POWER (E,MX,TH)	
⚠CNP901	1-575-042-21	CORD, POWER (CND)	
⚠CNP901	1-575-651-21	CORD, POWER (AEP,UK,EA,SP,MY)	
⚠CNP901	1-696-845-31	CORD, POWER (AUS)	
⚠CNP901	1-783-531-31	CORD, POWER (US)	
⚠CNP901	1-783-941-31	CORD, POWER (AR)	
FL601	1-517-840-11	INDICATOR TUBE, FLUORESCENT	
HP101	A-2056-681-B	DECK (A) ASSY, HEAD (230AWR2)	
HP101	A-2056-683-B	DECK (A) ASSY, HEAD (230PWR2)	
HRPE101	A-2056-682-B	DECK (B) ASSY, HEAD (230AWR2)	
HRPE101	A-2056-684-B	DECK (B) ASSY, HEAD (230PWR2)	
M1	A-2004-628-A	MOTOR ASSY, CAPSTAN	
M101	X-4917-523-3	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	
M201	A-4660-977-A	MOTOR ASSY (TABLE)	
M901	1-698-792-11	FAN, DC (DR4/DR440/W300/W5000)	
M901	1-763-072-11	FAN, DC (DR5/DR6)	
⚠T901	1-433-615-11	TRANSFORMER, POWER (W300/W5000)	
⚠T901	1-433-616-11	TRANSFORMER, POWER (XB500)	
⚠T951	1-433-602-11	TRANSFORMER, POWER (W300/W5000)	
⚠T951	1-433-603-11	TRANSFORMER, POWER (XB500)	
⚠T951	1-433-604-11	TRANSFORMER, POWER (DR4/DR440)	
⚠T951	1-433-606-11	TRANSFORMER, POWER (DR5)	
⚠T951	1-433-611-11	TRANSFORMER, POWER (DR6)	

****

ACCESSORIES & PACKING MATERIALS

****

	1-475-572-41	COMMANDER, STANDARD (RM-SR5B)
	4-988-173-01	COVER, BATTERY (FOR RM-SR5B)
	1-501-374-11	ANTENNA, LOOP
	1-501-659-41	ANTENNA (FM) (DR4/DR5/DR6/DR440/W300/W5000)
	1-501-804-11	ANTENNA (FM)(XB500)
	1-569-008-21	ADAPTOR, CONVERSION 2P (EA,SP,MY)
	3-865-548-11	MANUAL, INSTRUCTION (ENGLISH)
	3-865-548-21	MANUAL, INSTRUCTION (FRENCH) (DR4:EA/W300:CND)
	3-865-548-31	MANUAL, INSTRUCTION (SPANISH) (DR4:AR,MX/DR5:AR,MX/DR6:AR,MX/DR440)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
	3-865-548-41	MANUAL, INSTRUCTION (FRENCH,SPANISH) (DR4:E,TH,SP/DR5:E,SP/DR6:E,SP,MY/XB500:AEP)	
	3-865-548-51	MANUAL, INSTRUCTION (CHINESE) (DR4:SP/DR5:SP/DR6:SP,MY)	
	3-865-548-61	MANUAL, INSTRUCTION (ARABIC)	(DR4:EA)
	3-865-548-71	MANUAL, INSTRUCTION (GERMAN)	(XB500:AEP)
	3-865-548-81	MANUAL, INSTRUCTION (DUTCH,ITALIAN,PORTUGUESE,SWEDISH)	(XB500:AEP)
	3-865-548-91	MANUAL, INSTRUCTION (POLISH, RUSSIAN)	(XB500:AEP)
	3-865-549-11	MANUAL, INSTRUCTION (CZECH)	(XB500:AEP)
	3-865-549-21	MANUAL, INSTRUCTION (HUNGARIAN)	(XB500:AEP)
	3-865-549-31	MANUAL, INSTRUCTION (TURKISH)	(XB500:AEP)

****

****
HARDWARE LIST
****

#1	7-685-871-01	SCREW +BVTT 3X6 (S)
#2	7-685-872-09	SCREW +BVTT 3X8 (S)
#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
#4	7-685-534-14	SCREW +BTP 2.6X8 TYPE2 N-S
#5	7-685-553-19	SCREW +BTP 2.6X6 TYPE2 N-S
#6	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT
#7	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3
#8	7-685-881-09	SCREW +BVTT 4X8 (S)
#9	7-685-853-04	SCREW +BVTT 2X6 (S)
#10	7-685-850-04	SCREW +BVTT 2X3 (S)
#11	7-685-851-04	SCREW +BVTT 2X4 (S)
#12	7-628-254-15	SCREW +PS 2.6X6
#13	7-628-254-50	SCREW +PS 2.6X16

99A0989-1
Printed in Japan © 1999. 1
Published by Quality Assurance Dept.
(Shinagawa)